

FIG. 1A

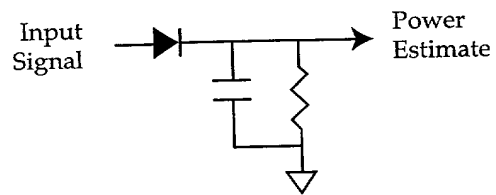


FIG. 1B

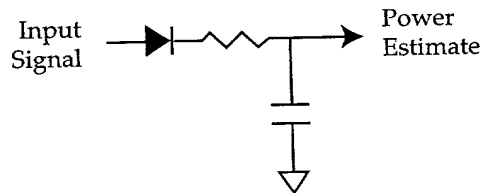


FIG. 1C

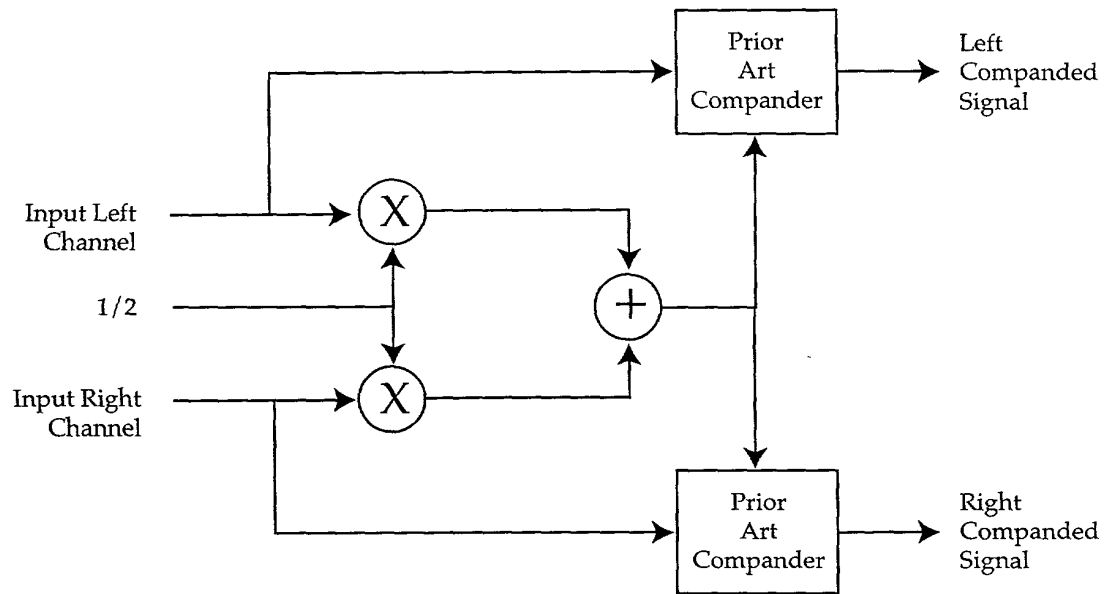


FIG. 1D

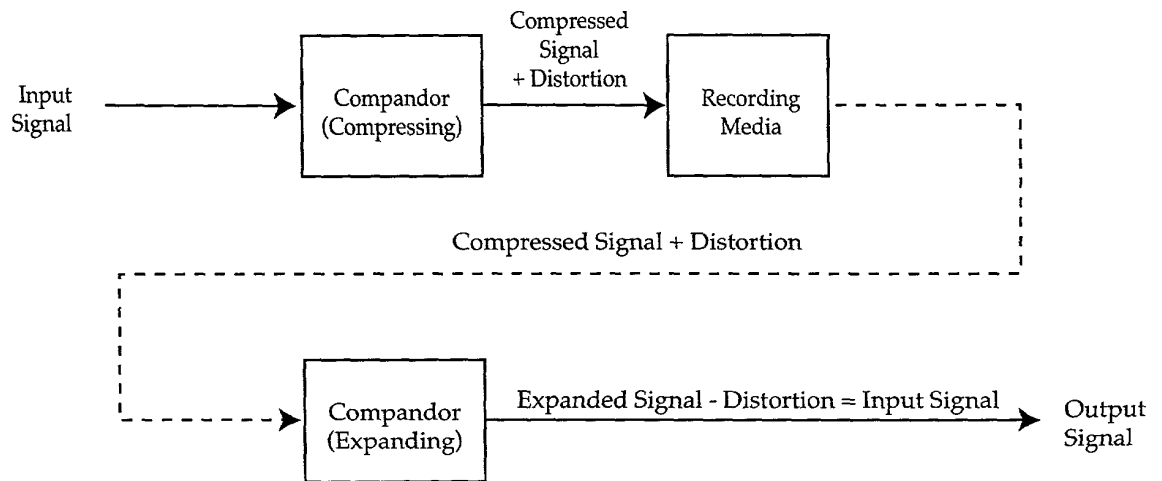


FIG. 1E

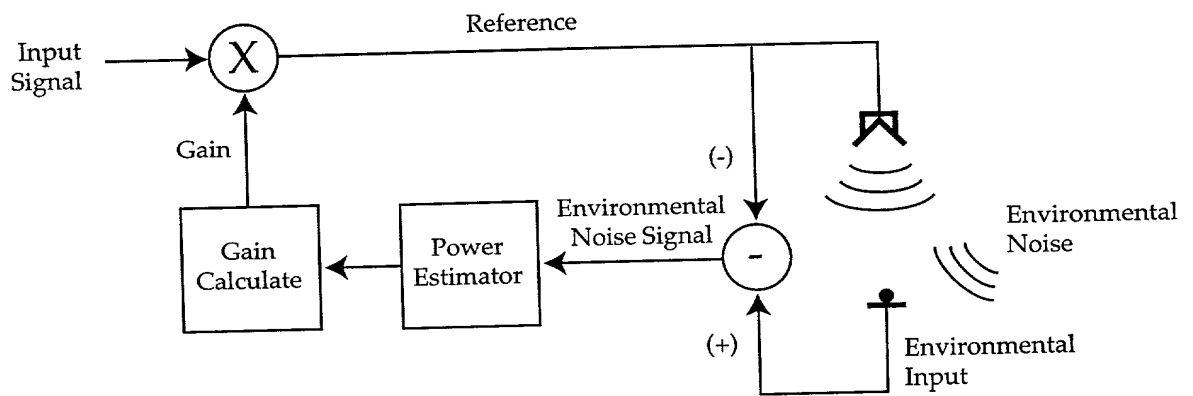


FIG. 2

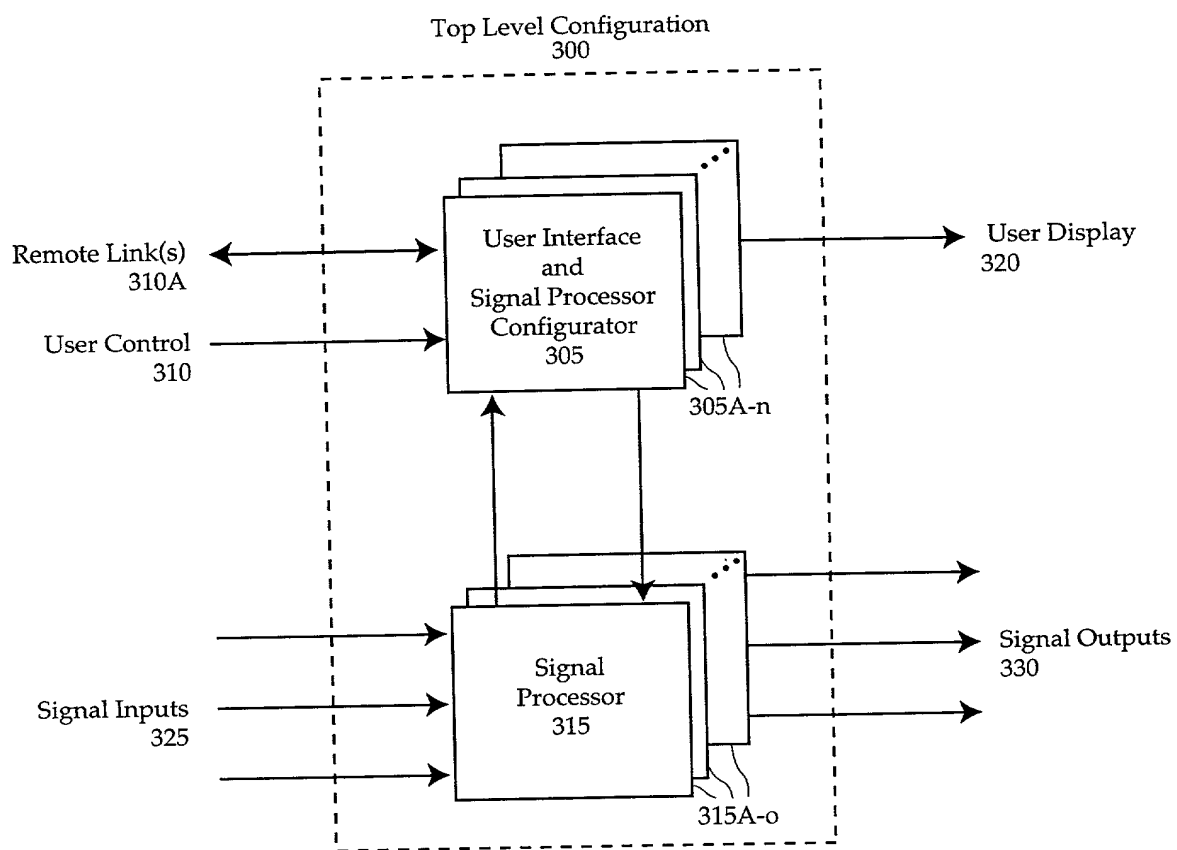


FIG. 3A

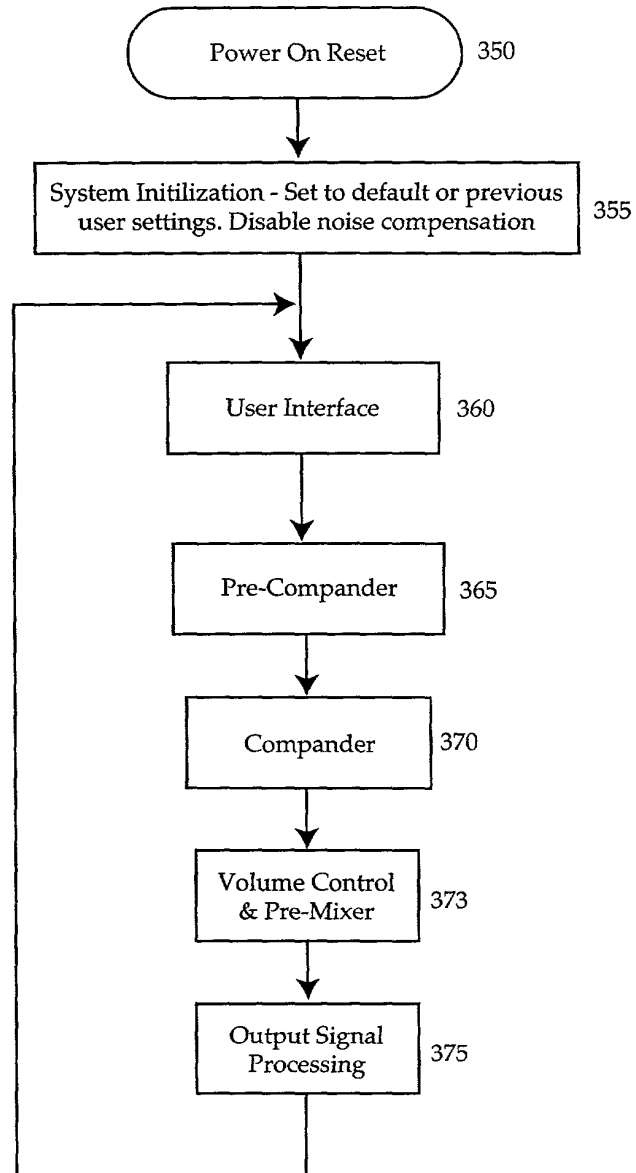


FIG. 3B

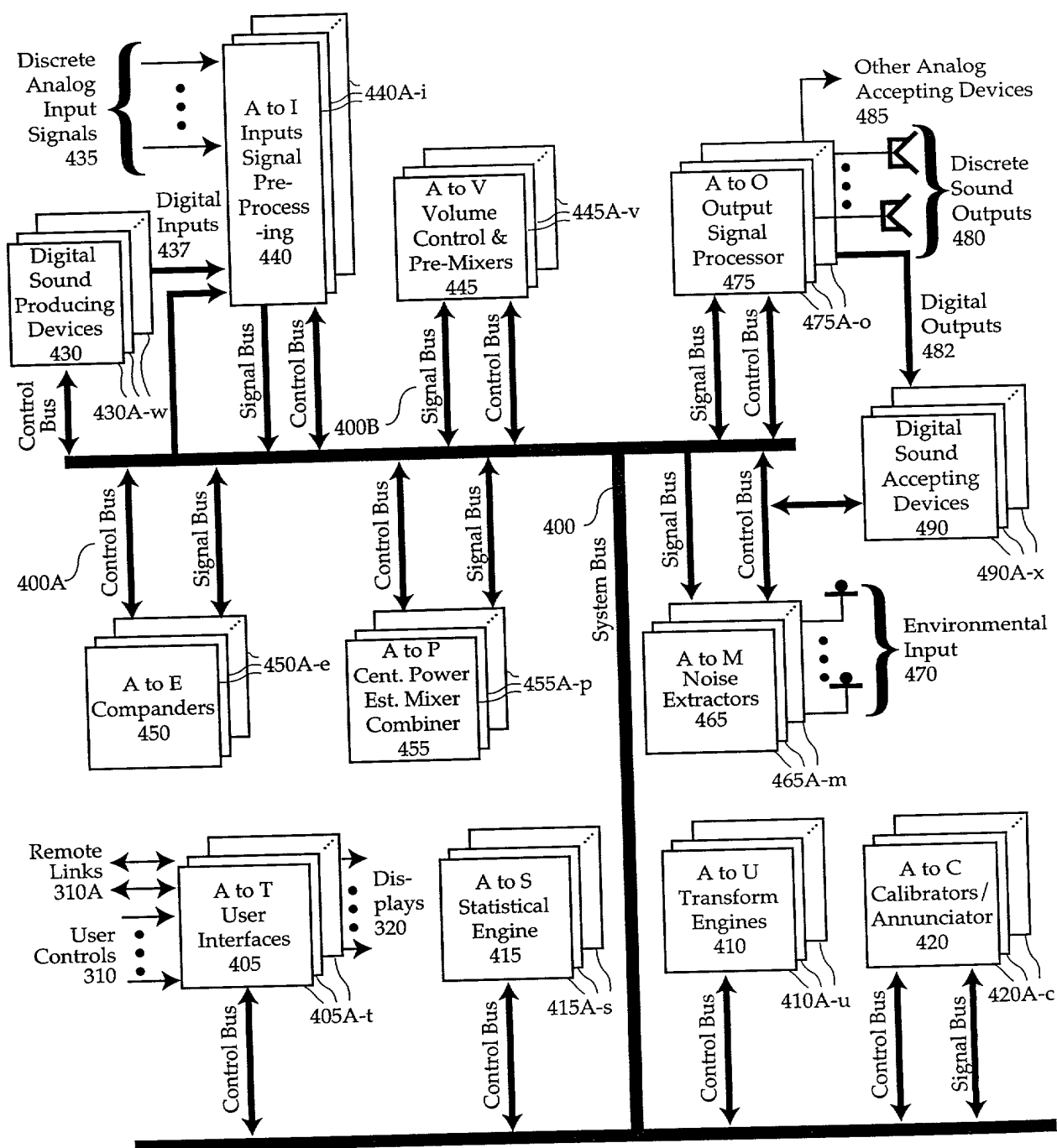


FIG. 4

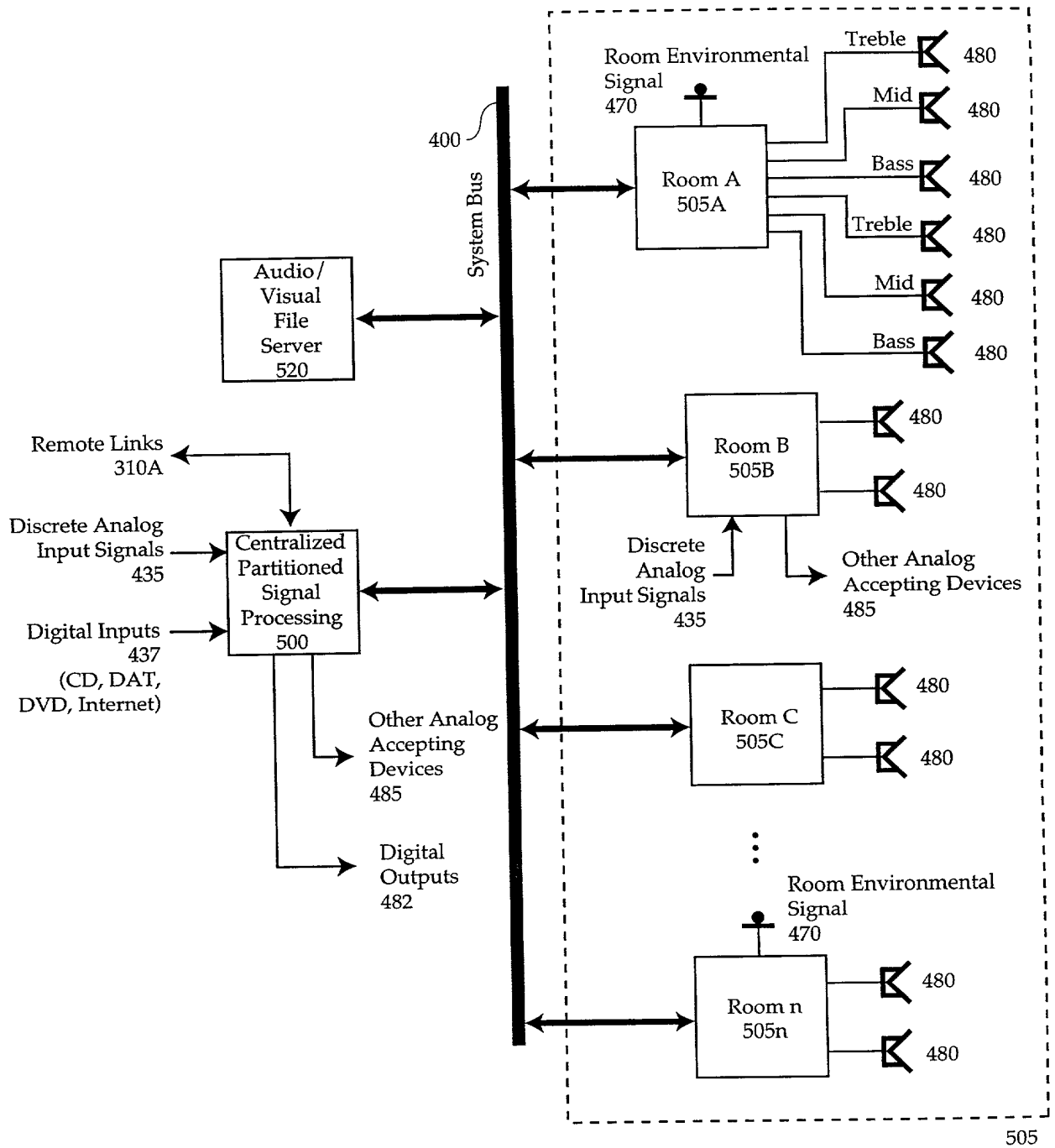


FIG. 5A

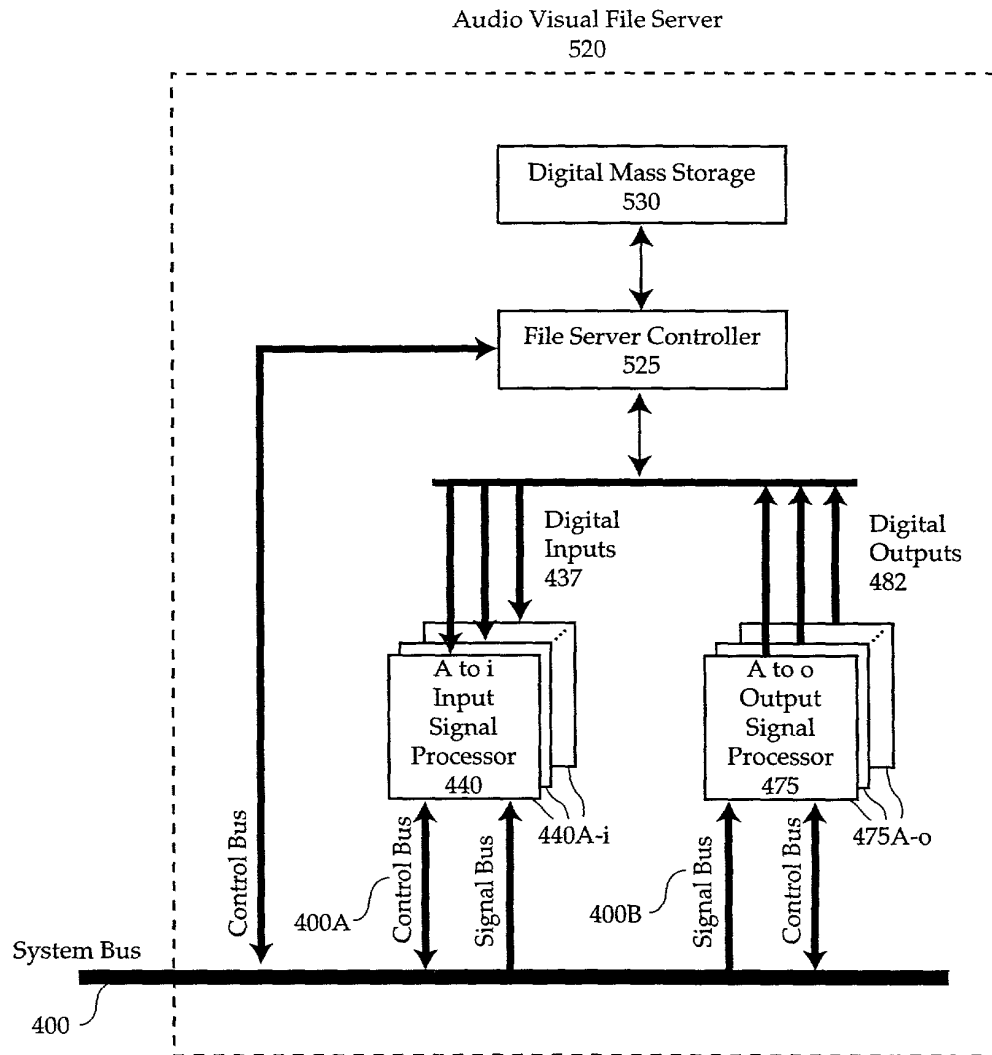


FIG. 5B

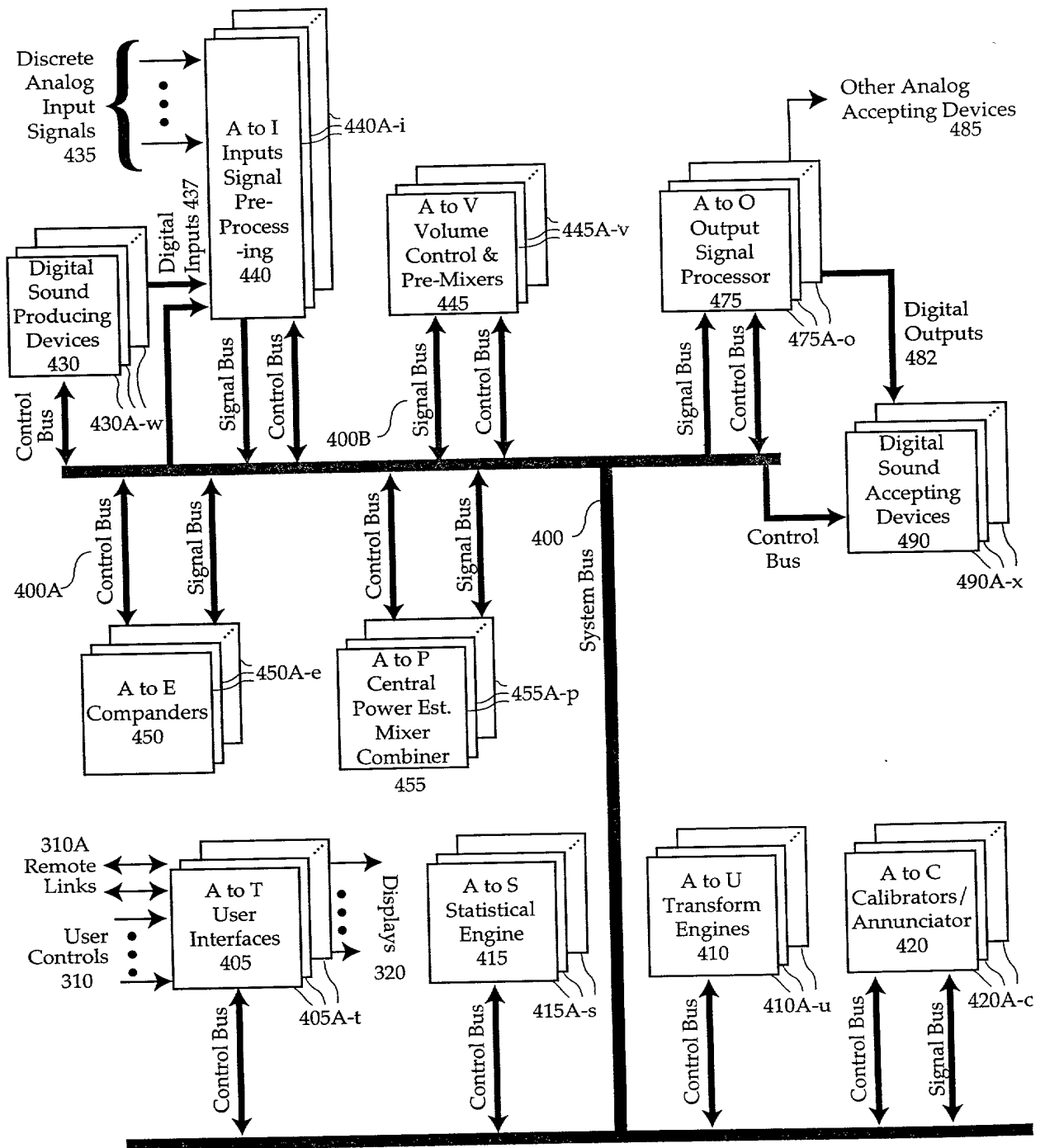


FIG. 5C

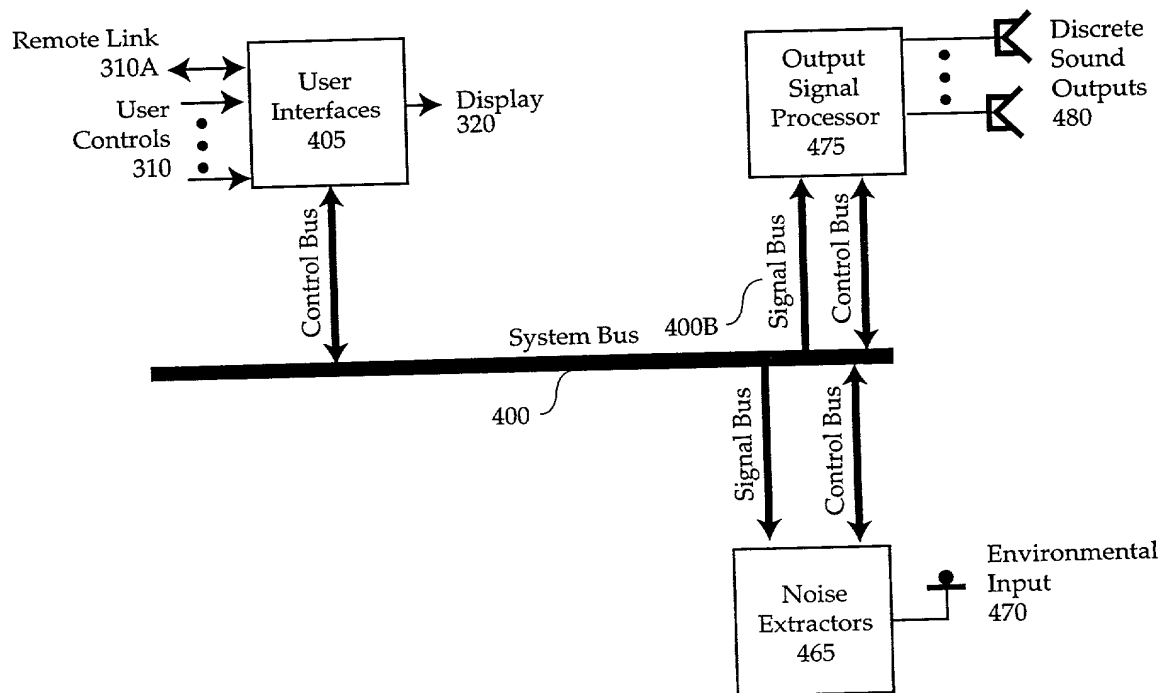


FIG. 5D

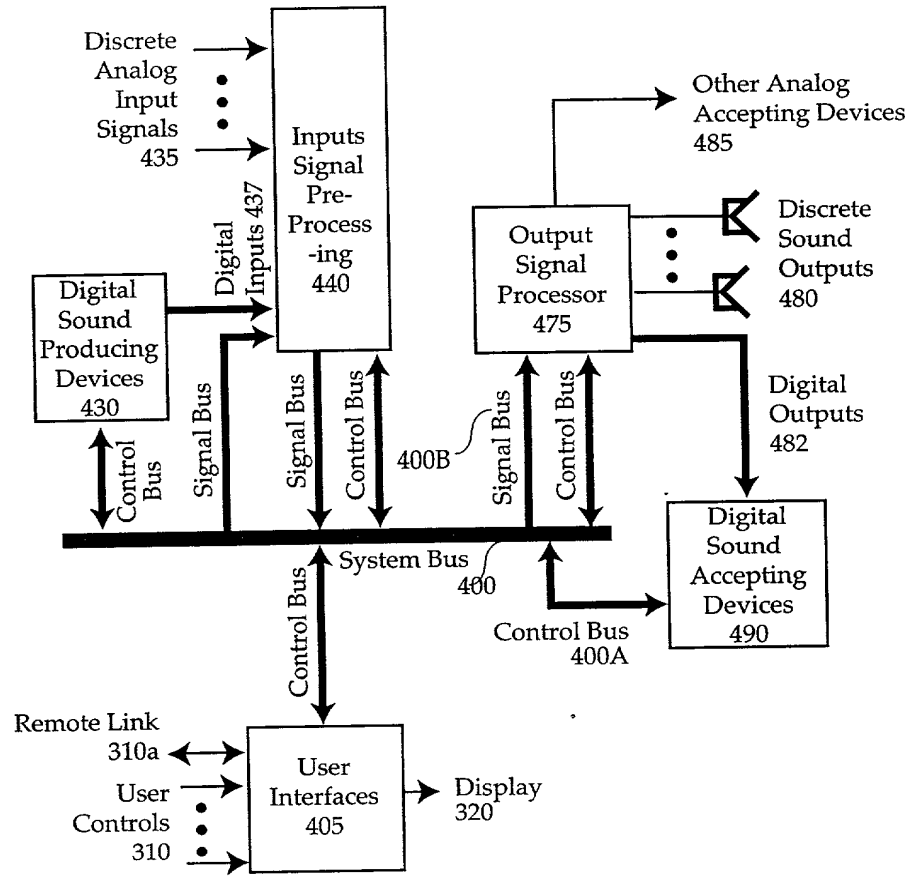


FIG. 5E

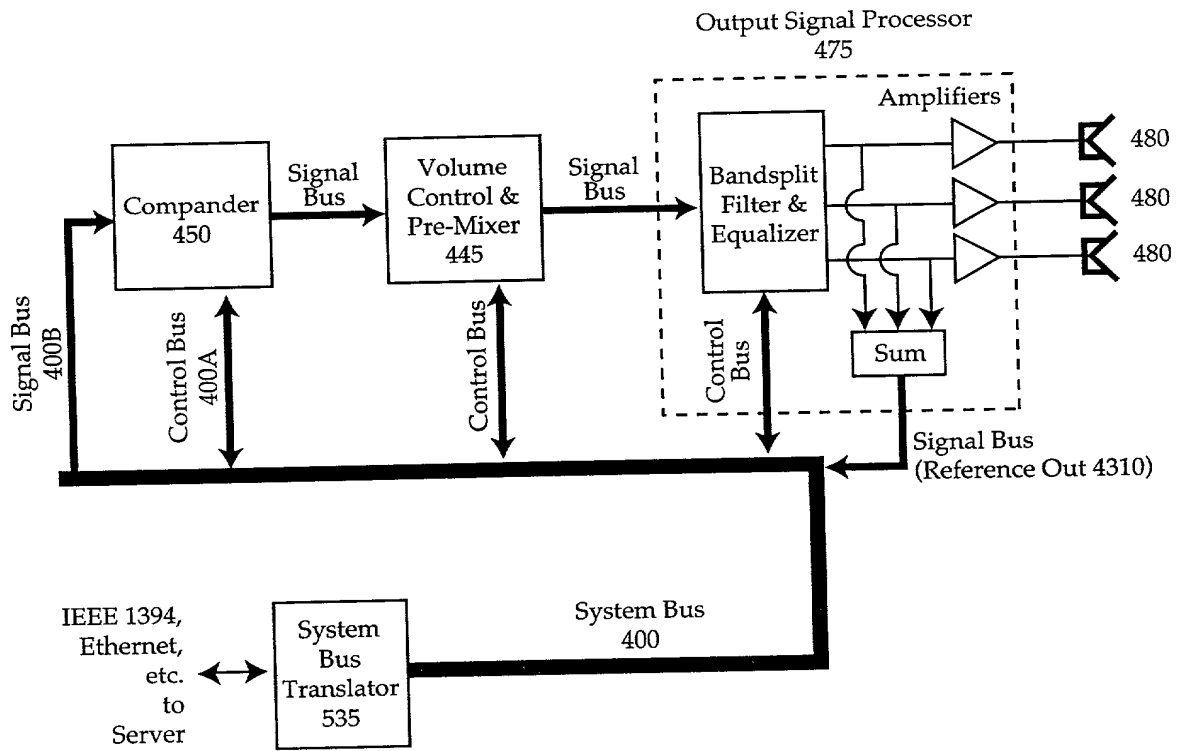


FIG. 5F

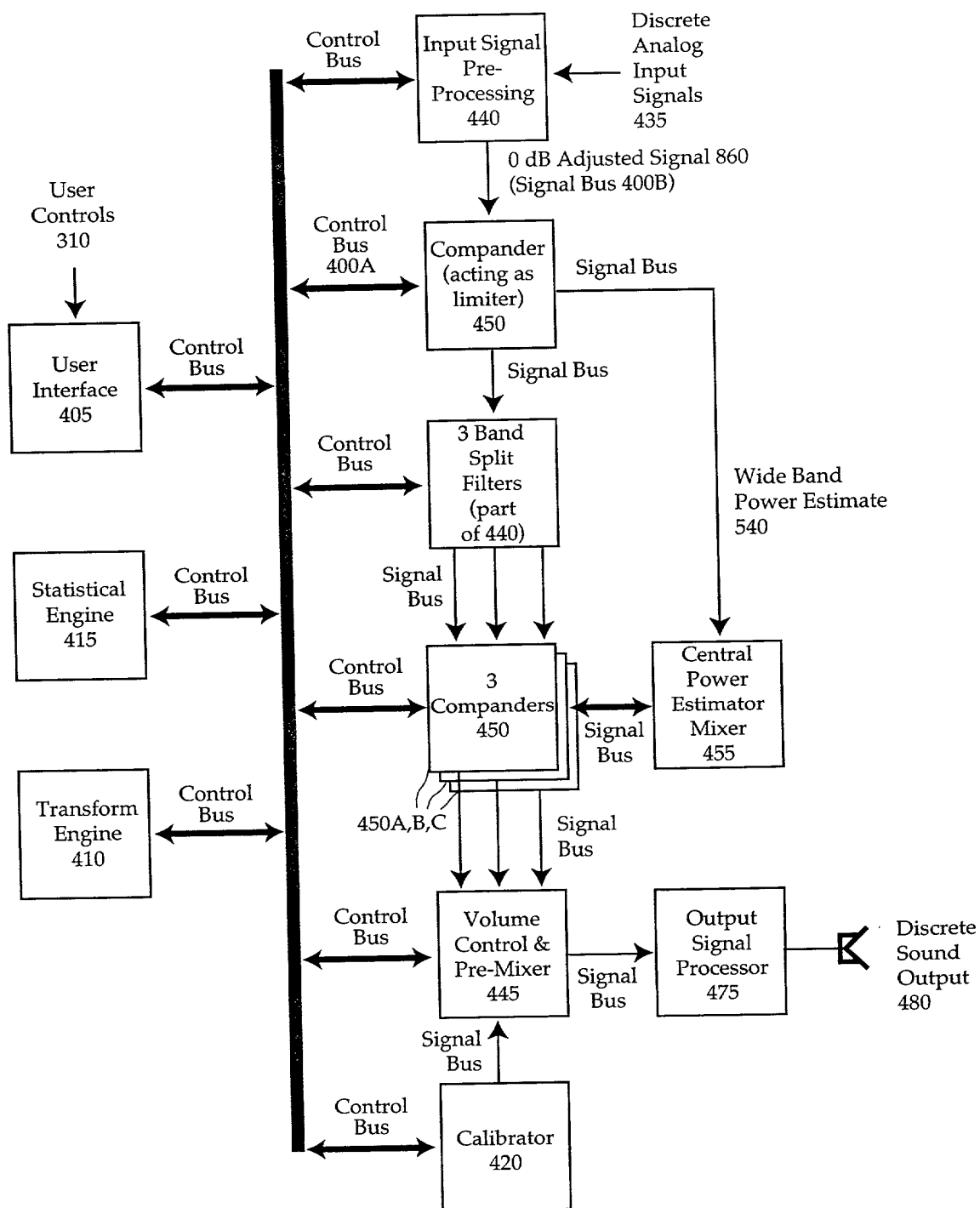


FIG. 5G

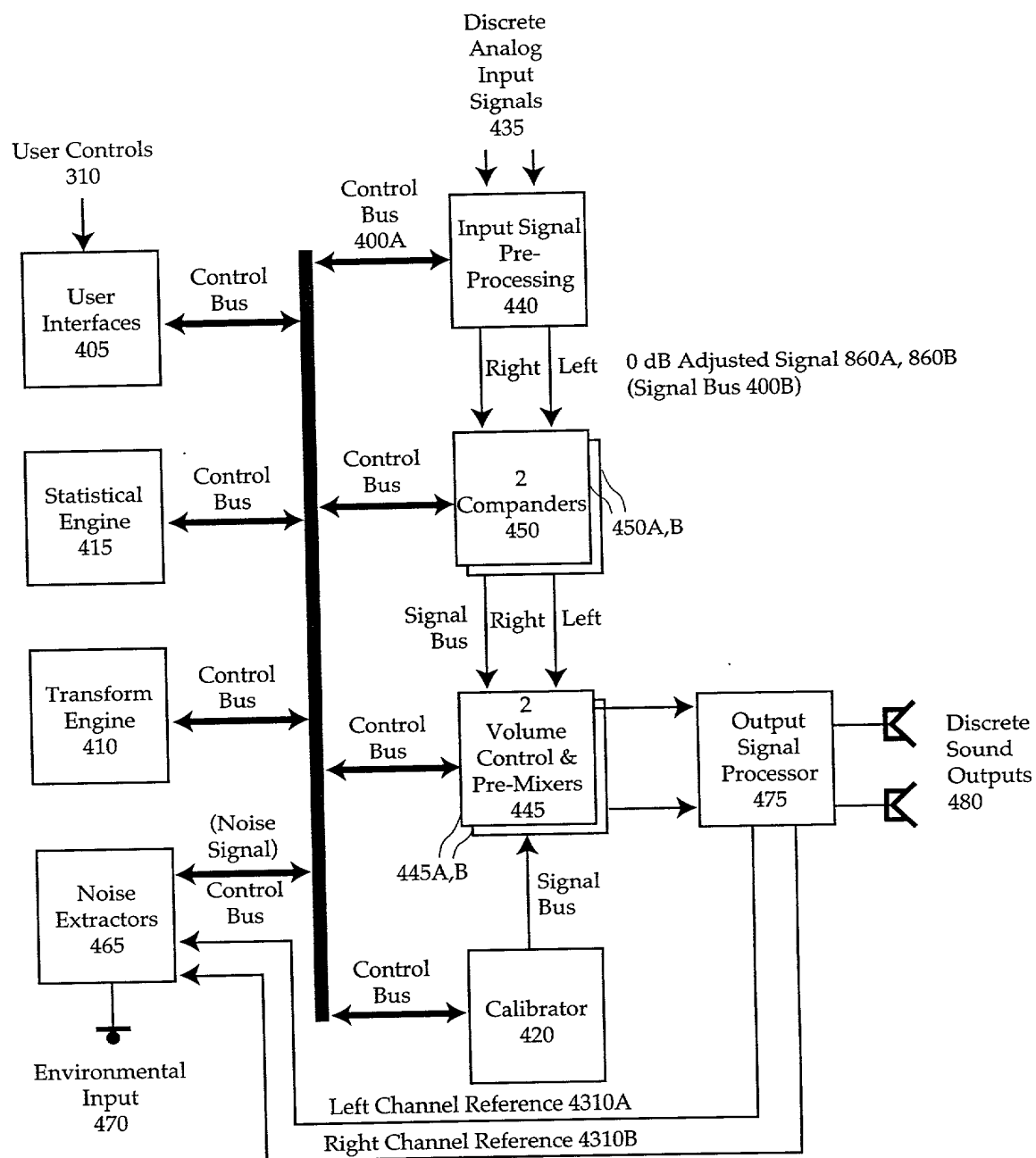


FIG. 5H

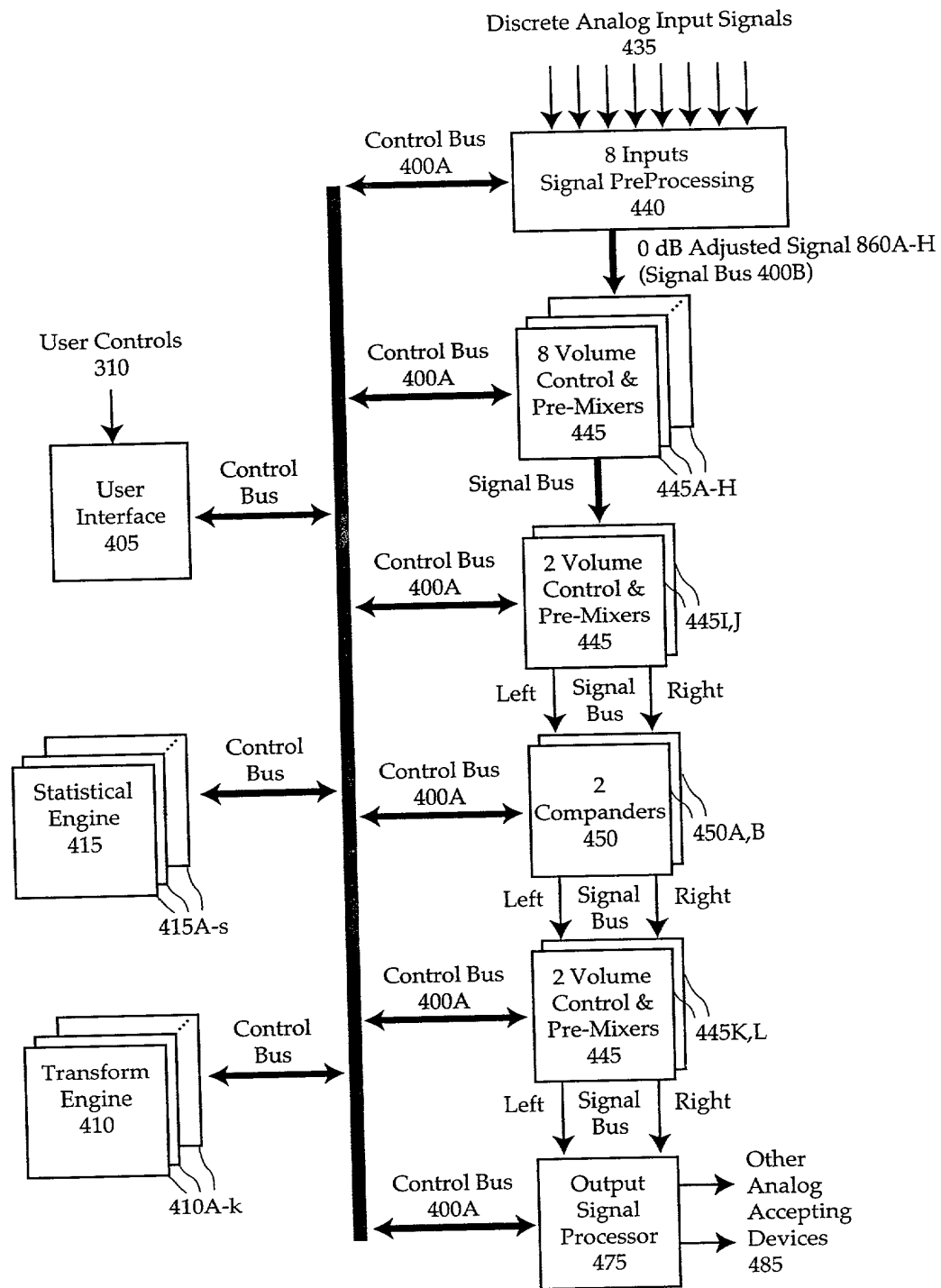


FIG. 5I

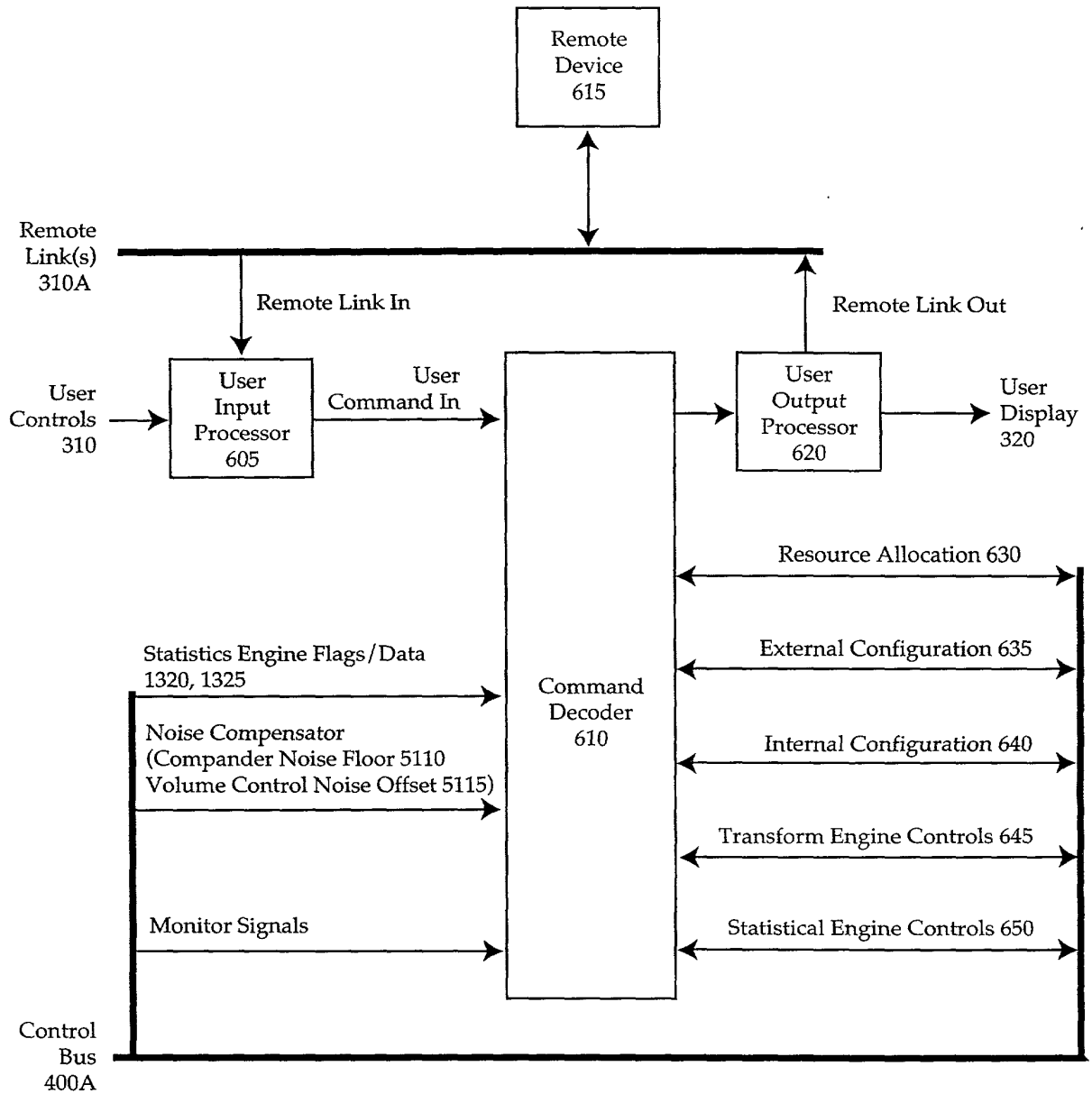


FIG. 6A

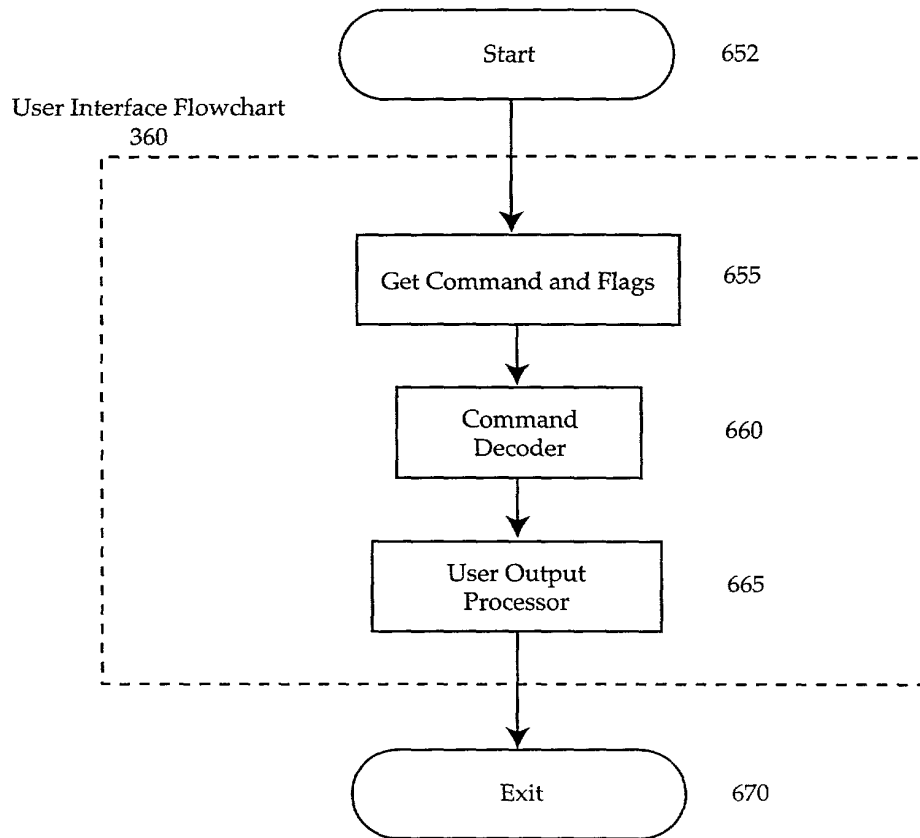


FIG. 6B

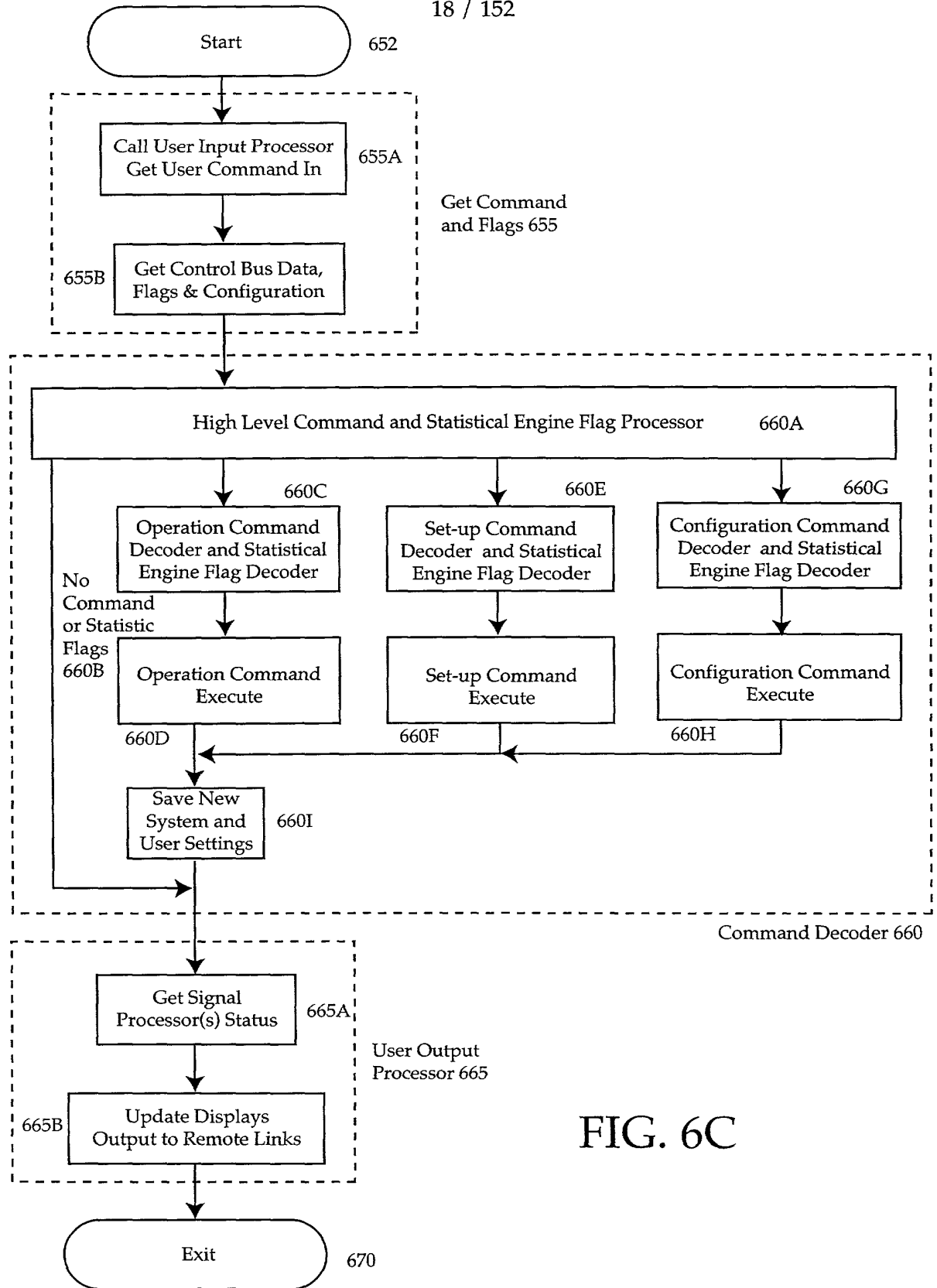


FIG. 6C

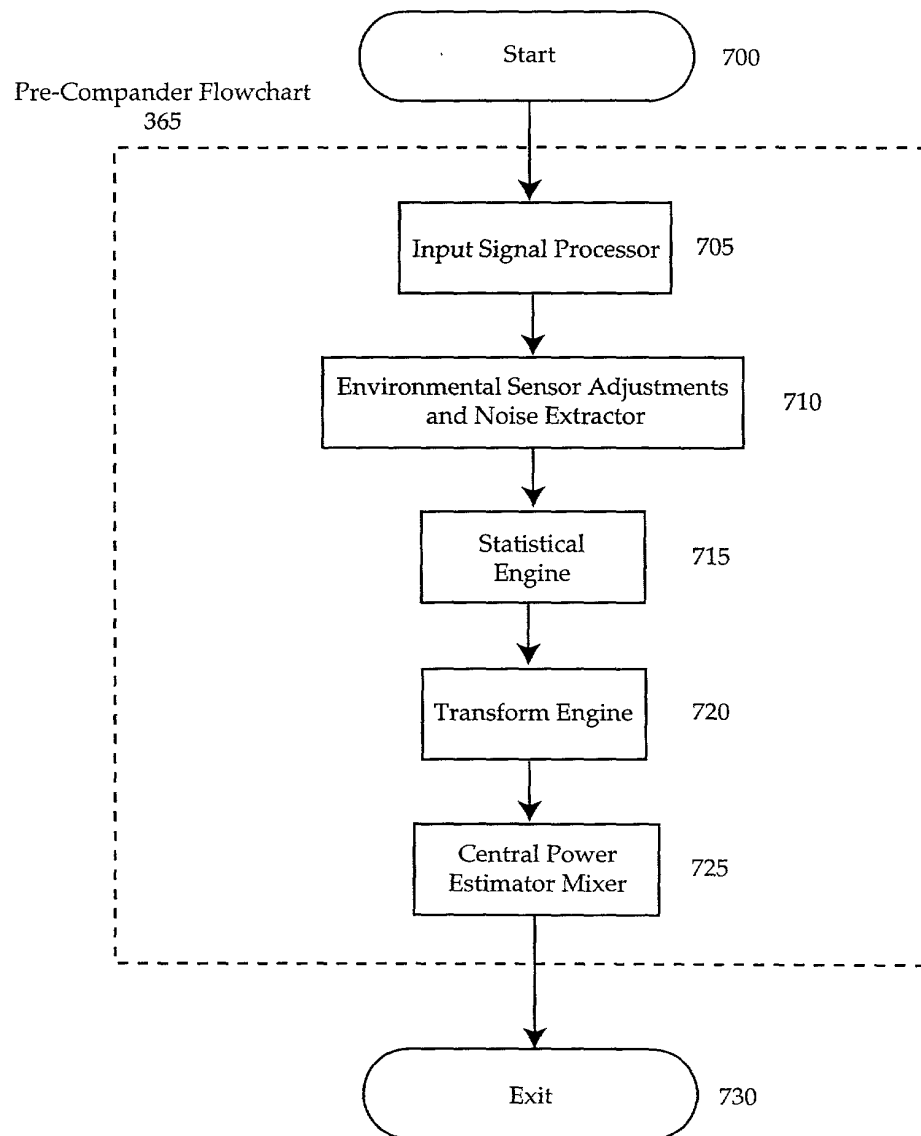


FIG. 7

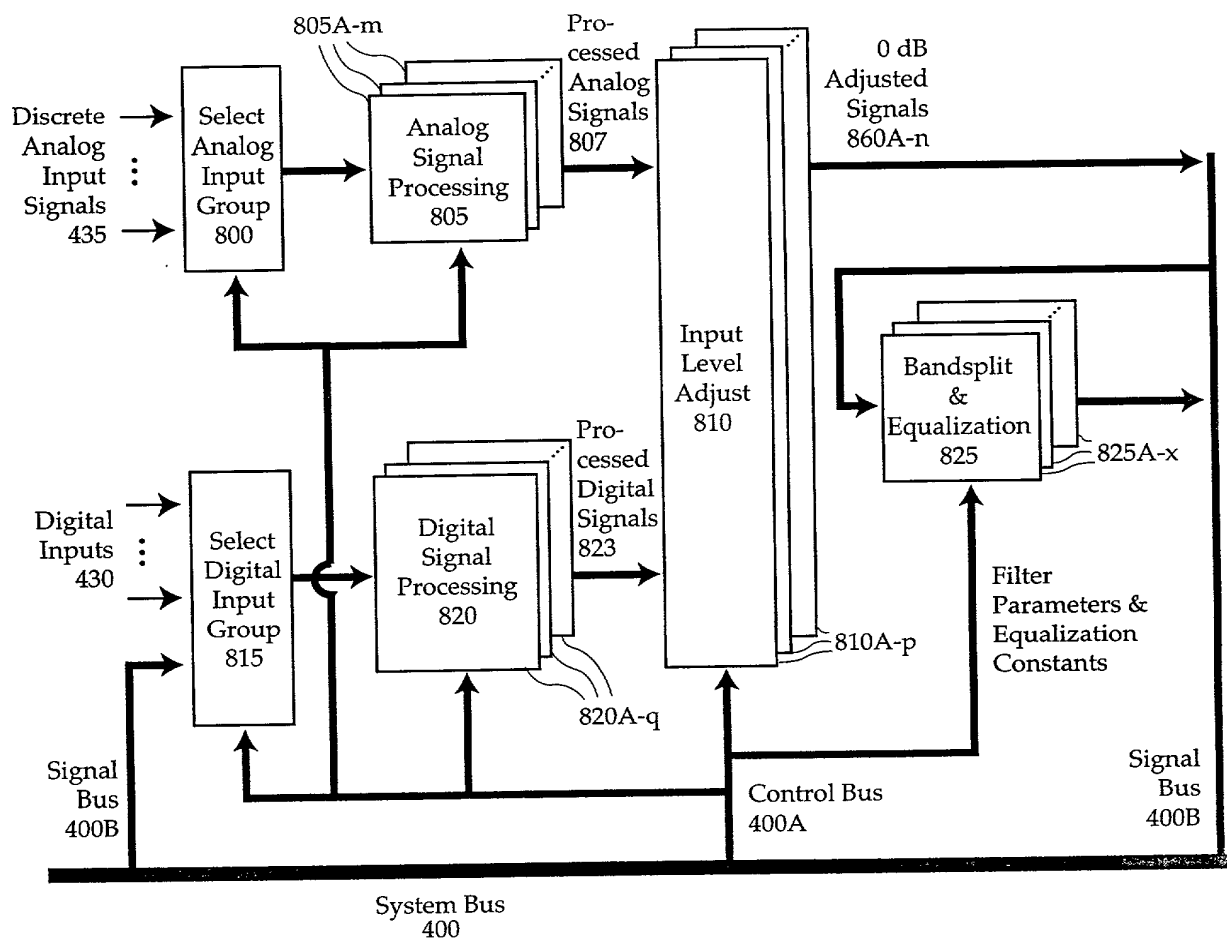


FIG. 8A

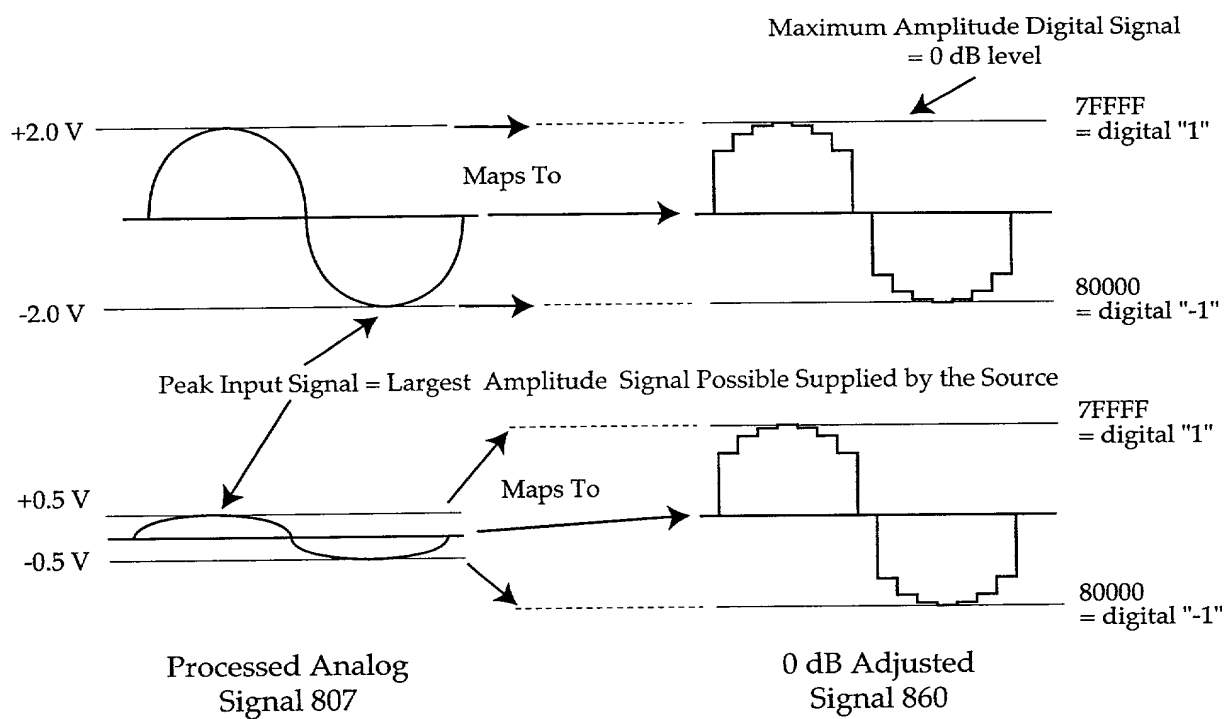


FIG. 8B

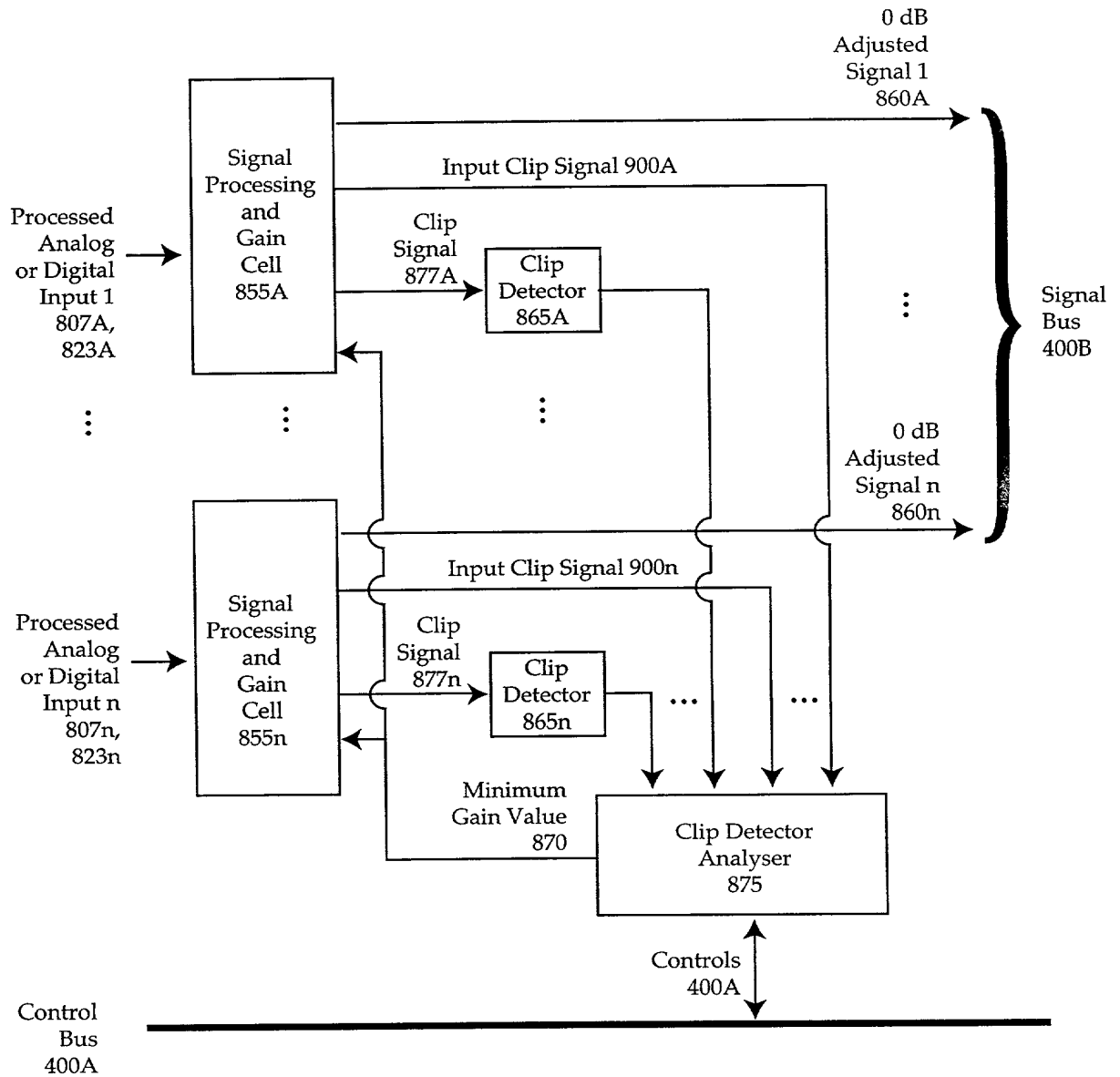


FIG. 8C

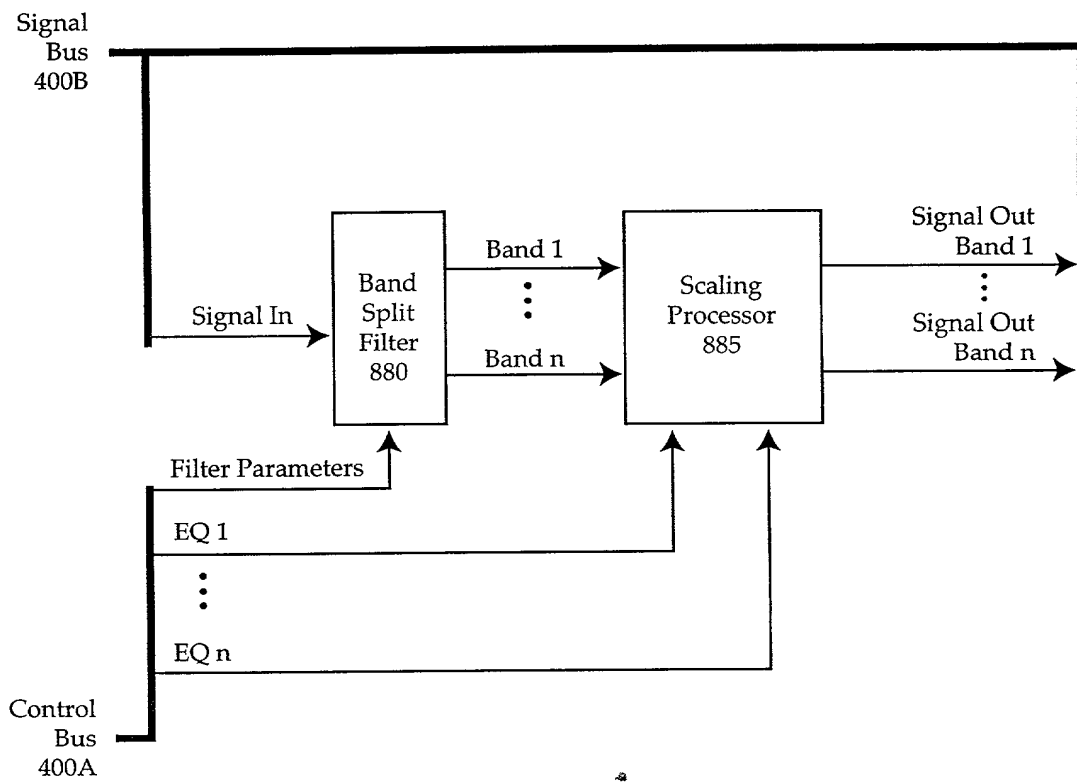


FIG. 8D

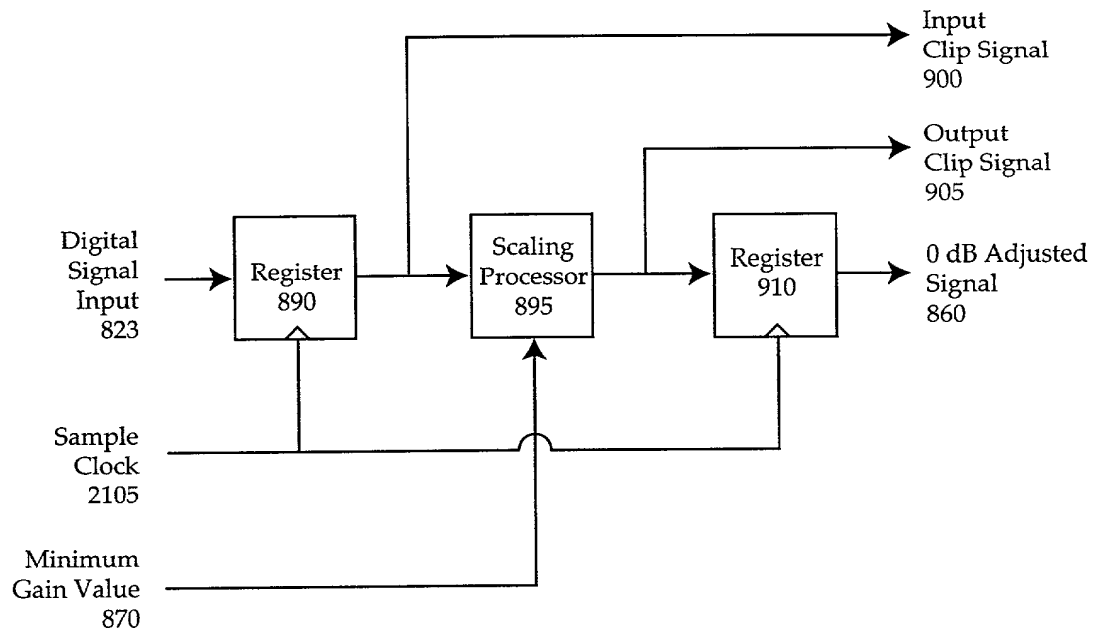


FIG. 8E

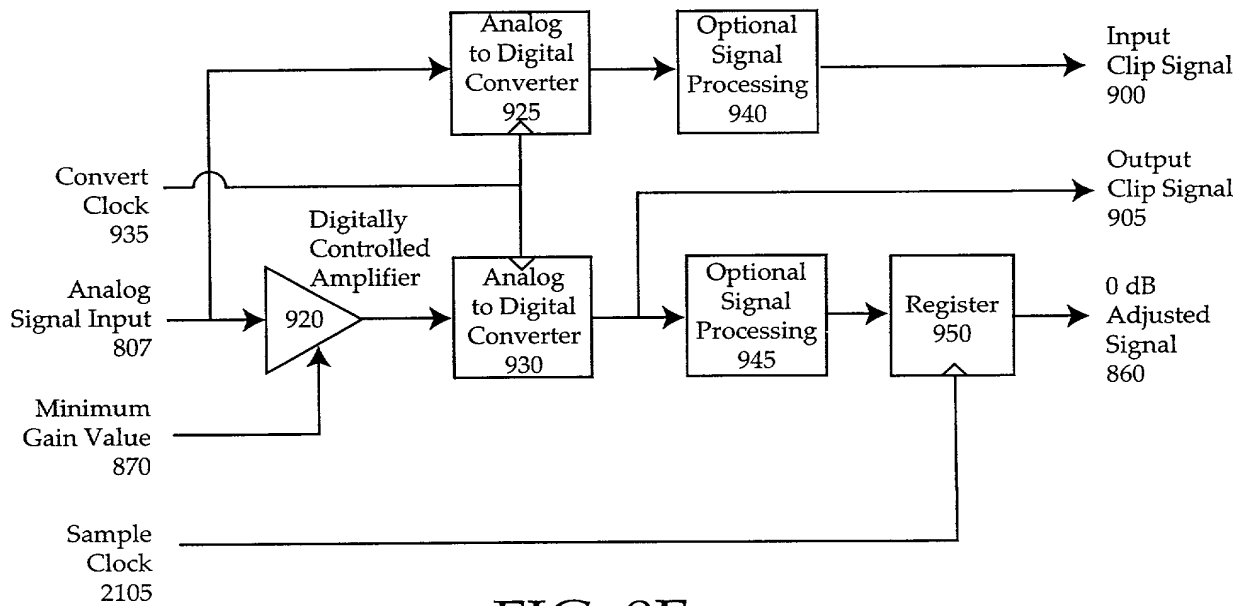


FIG. 8F

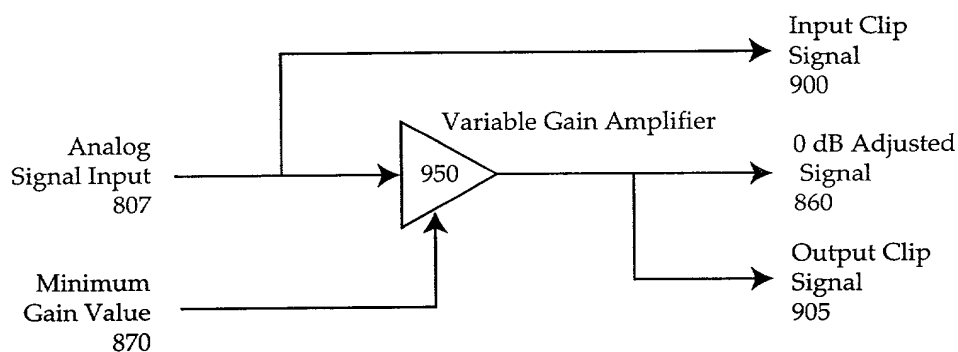


FIG. 8G

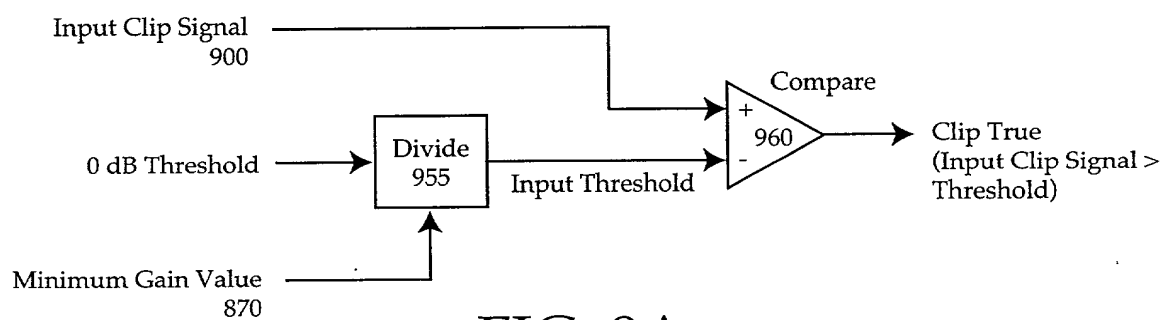


FIG. 9A

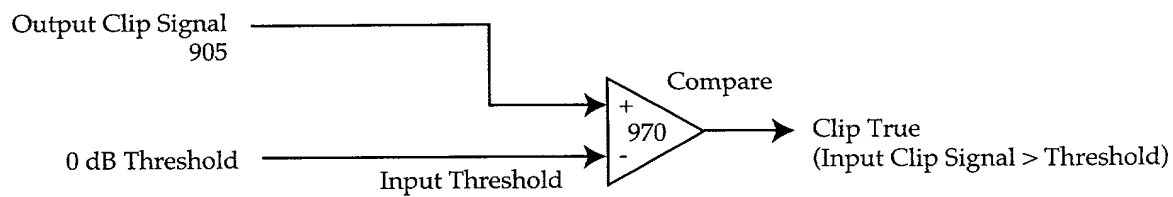


FIG. 9B

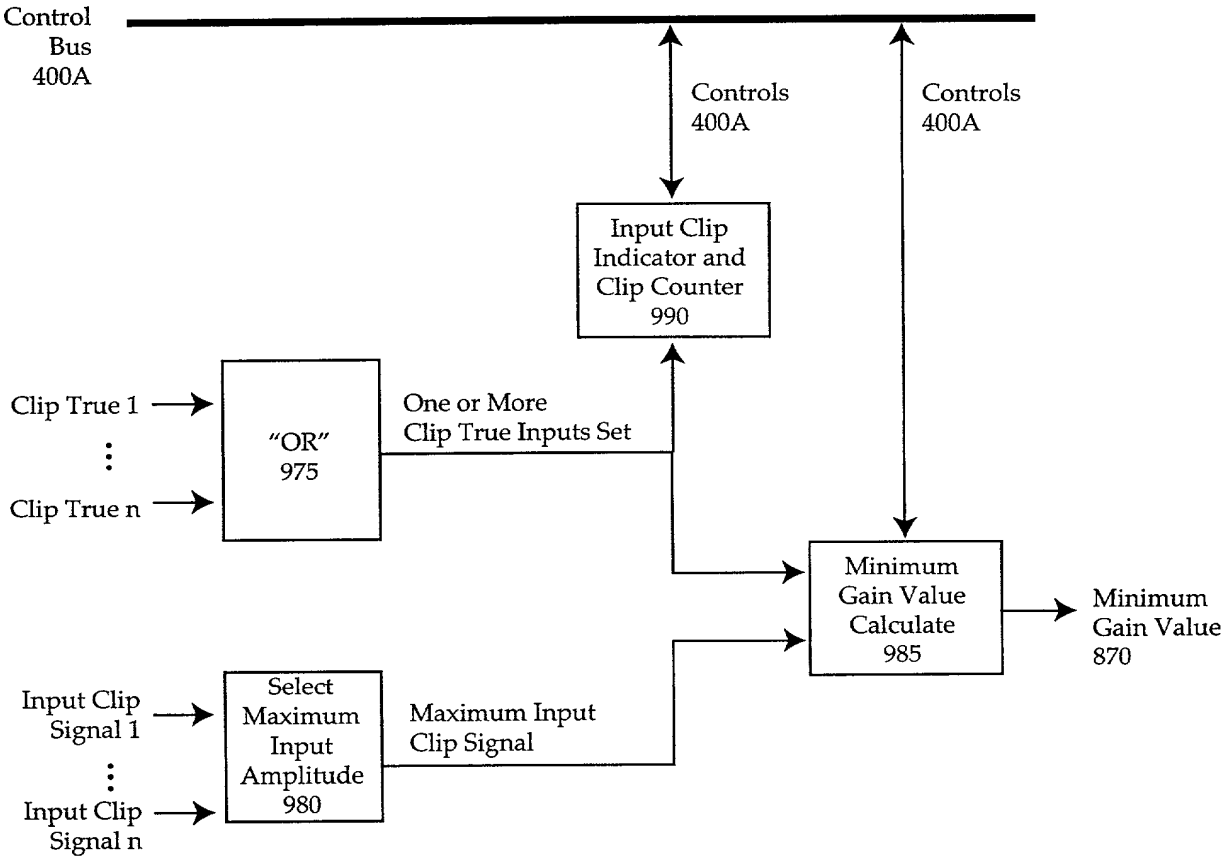
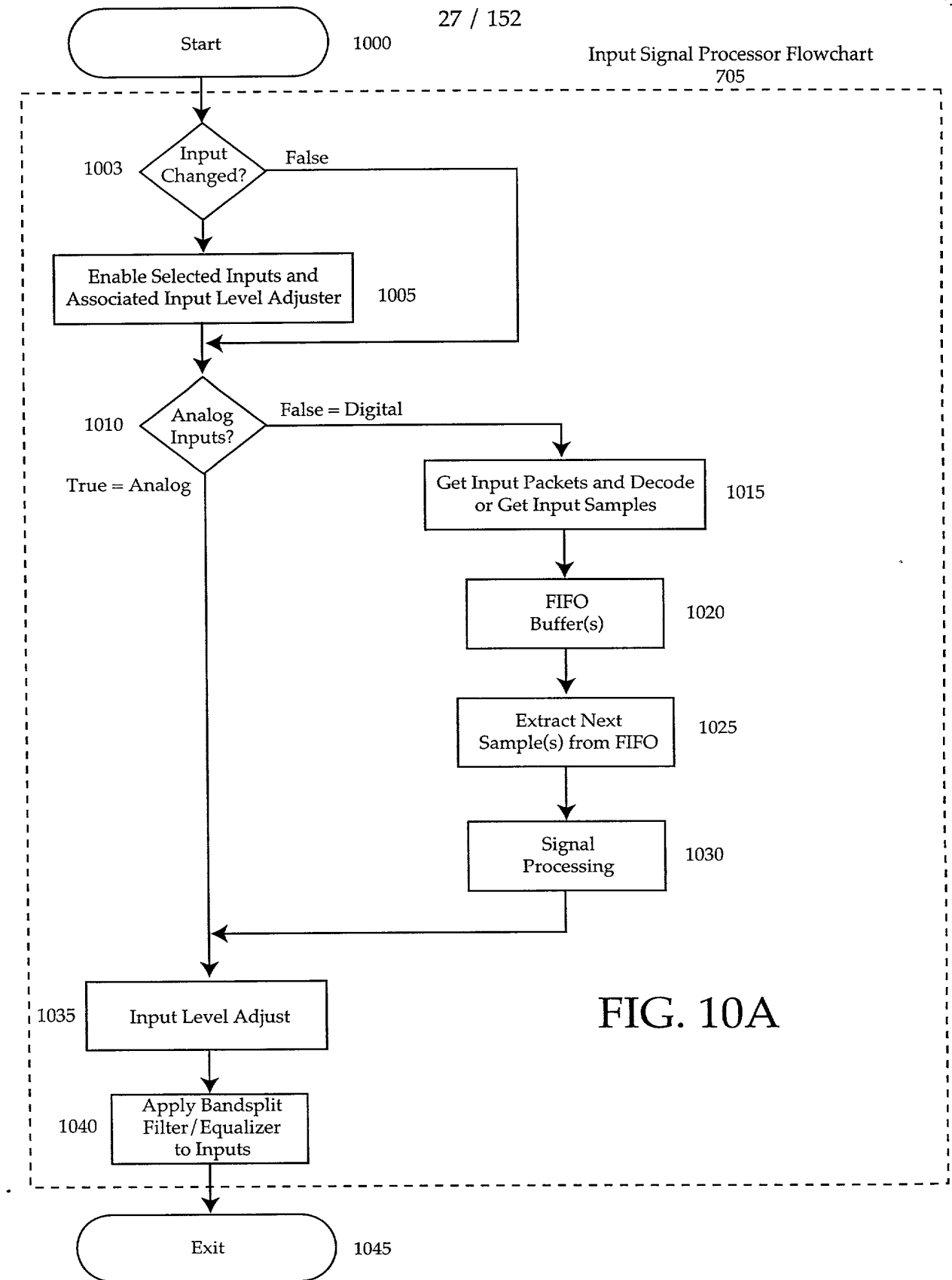


FIG. 9C

Input Signal Processor Flowchart
705

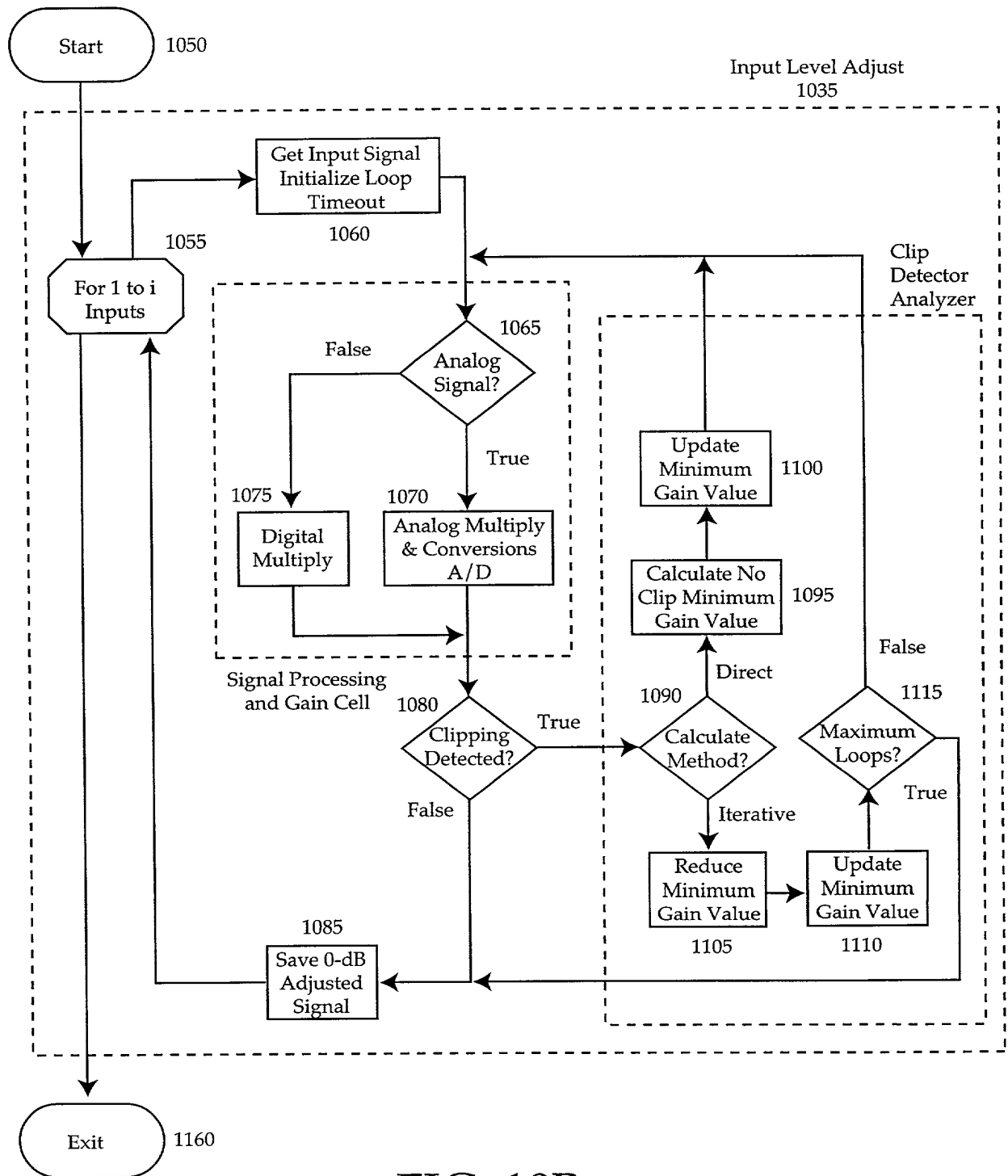


FIG. 10B

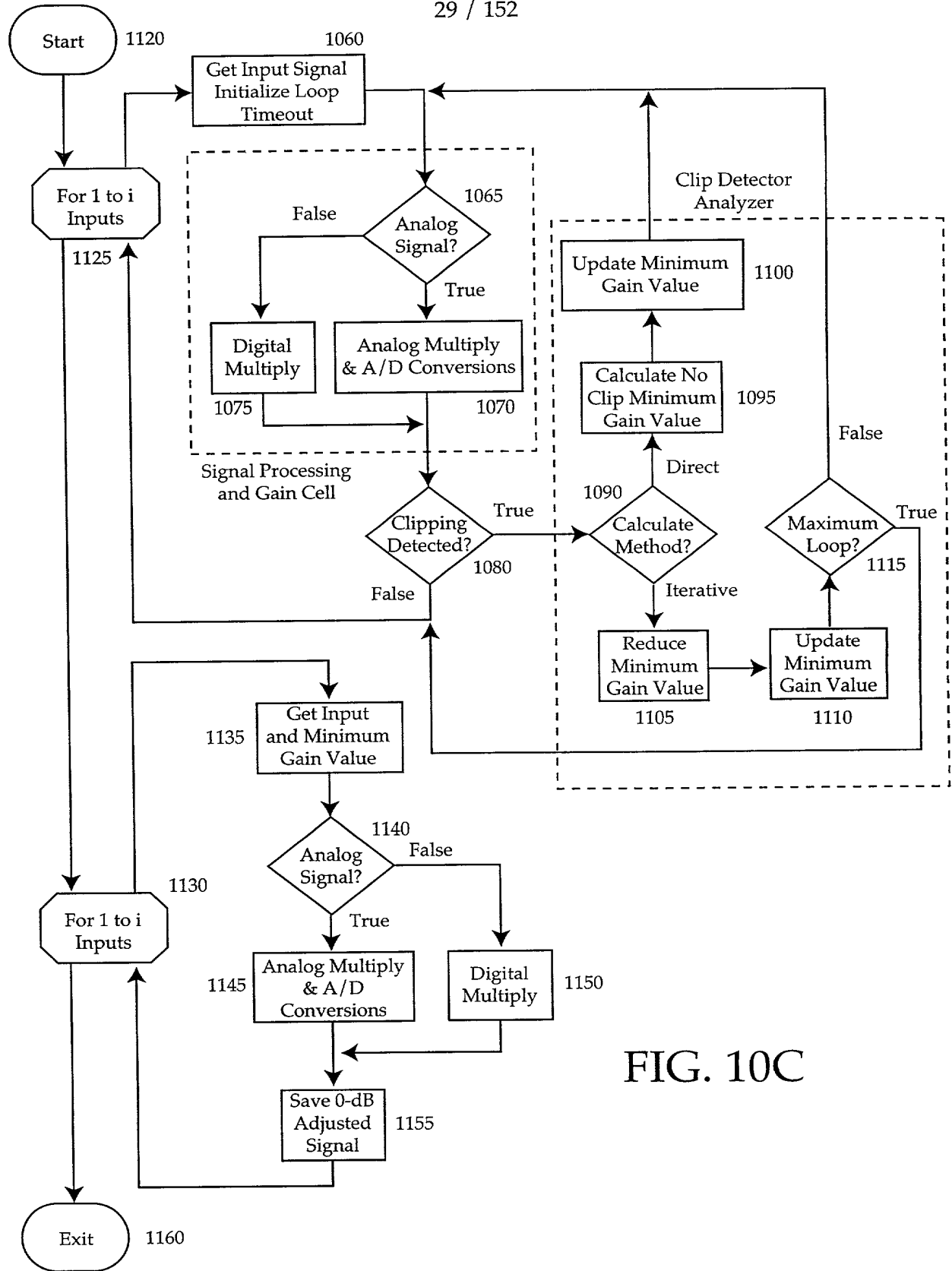


FIG. 10C

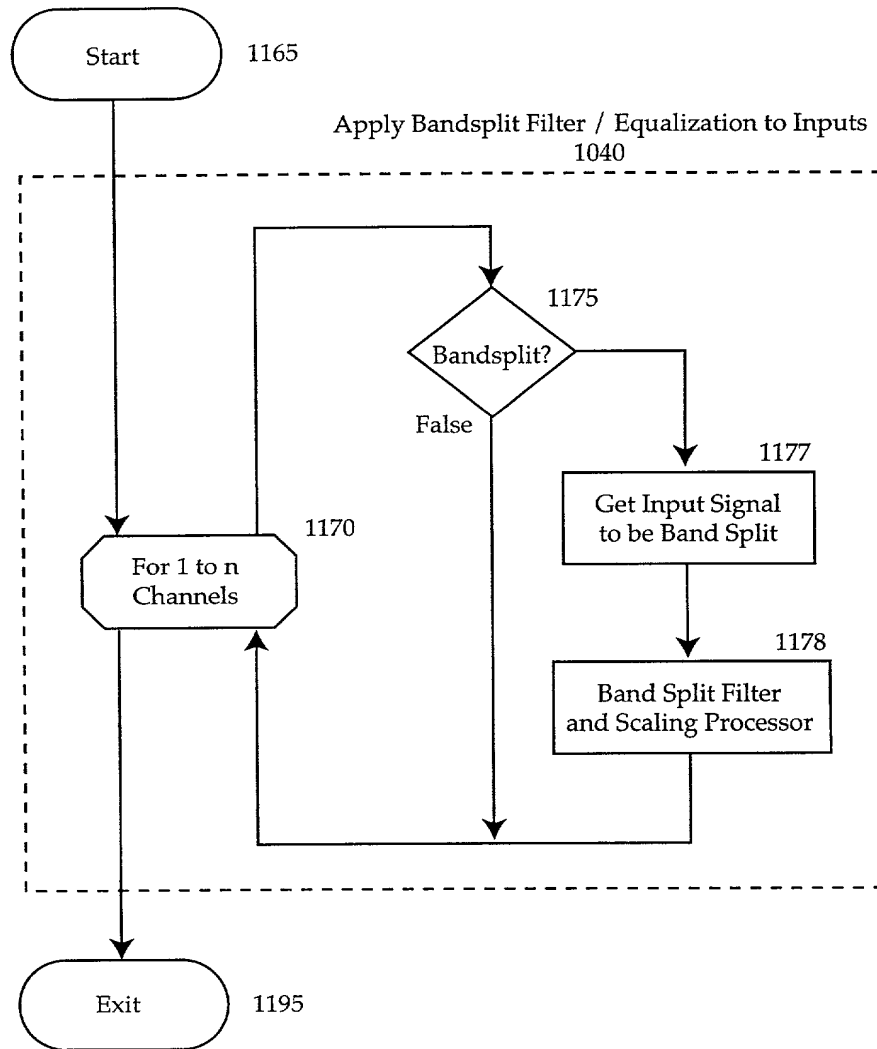


FIG. 10D

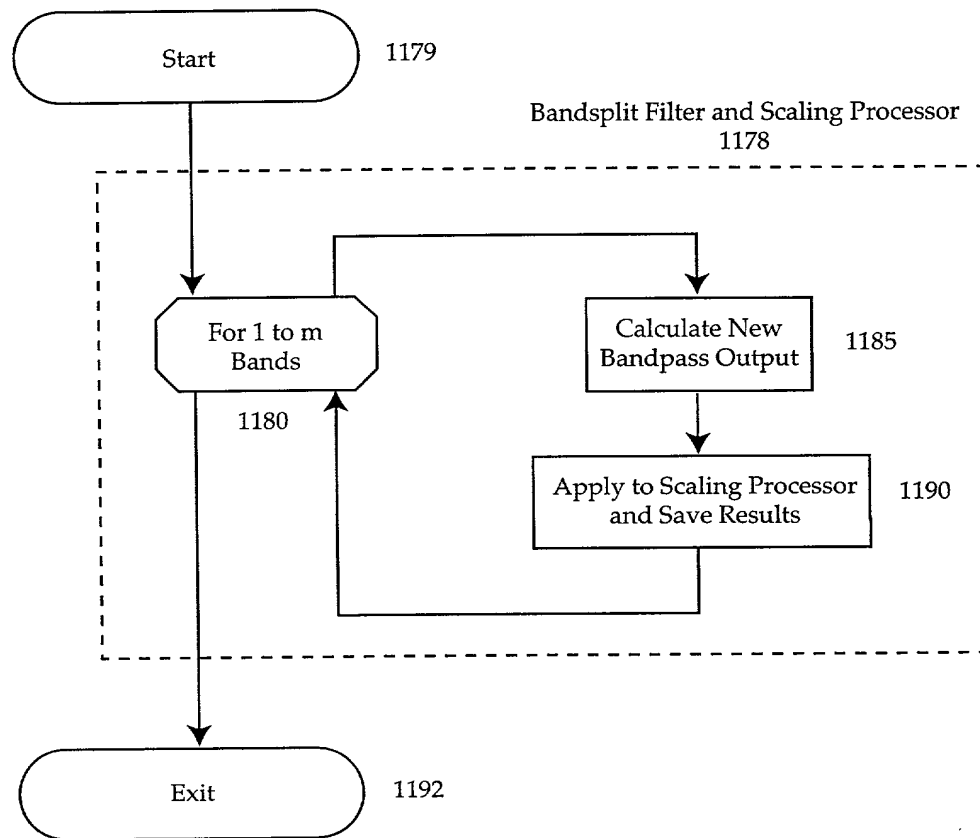


FIG. 10E

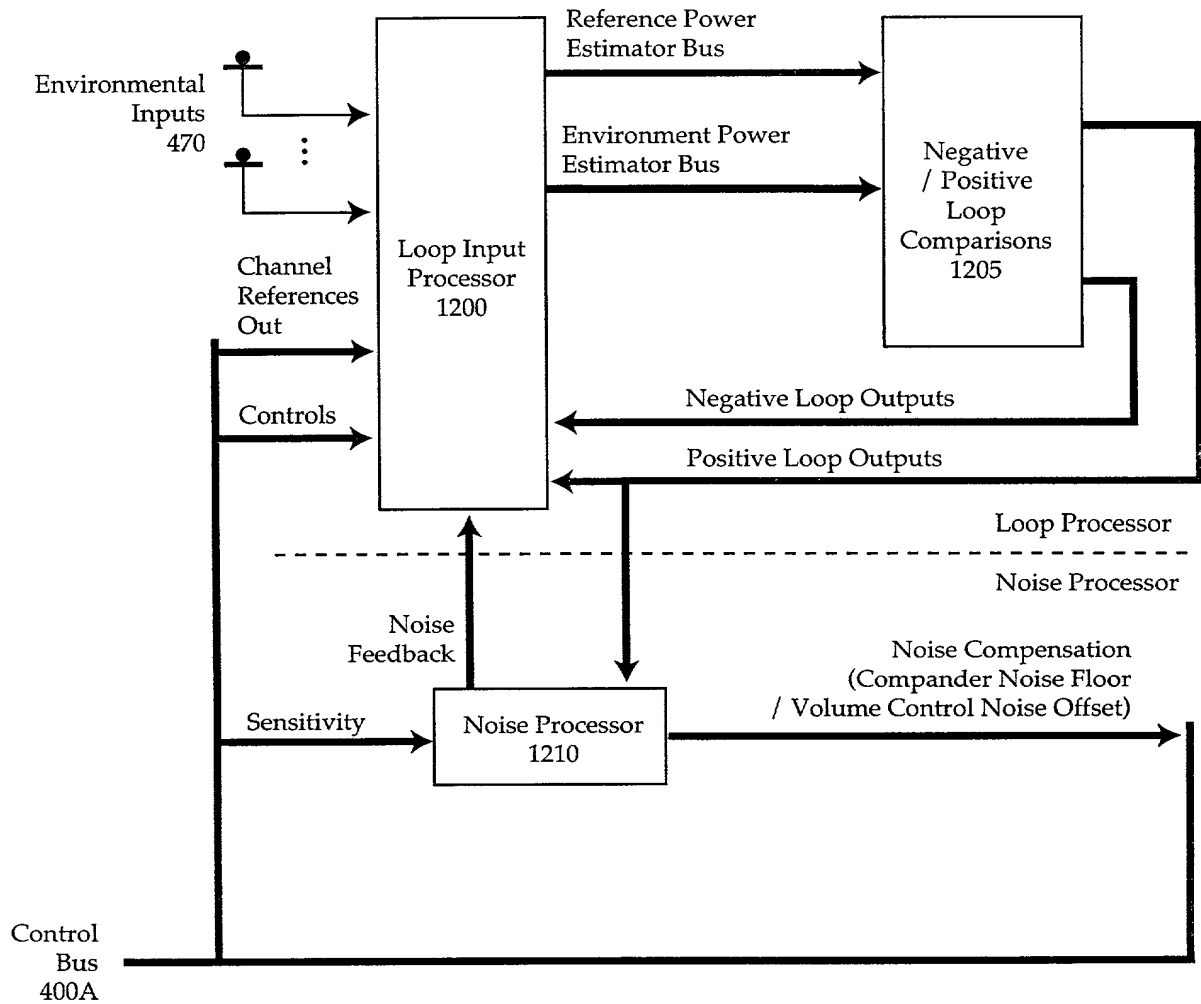


FIG. 11

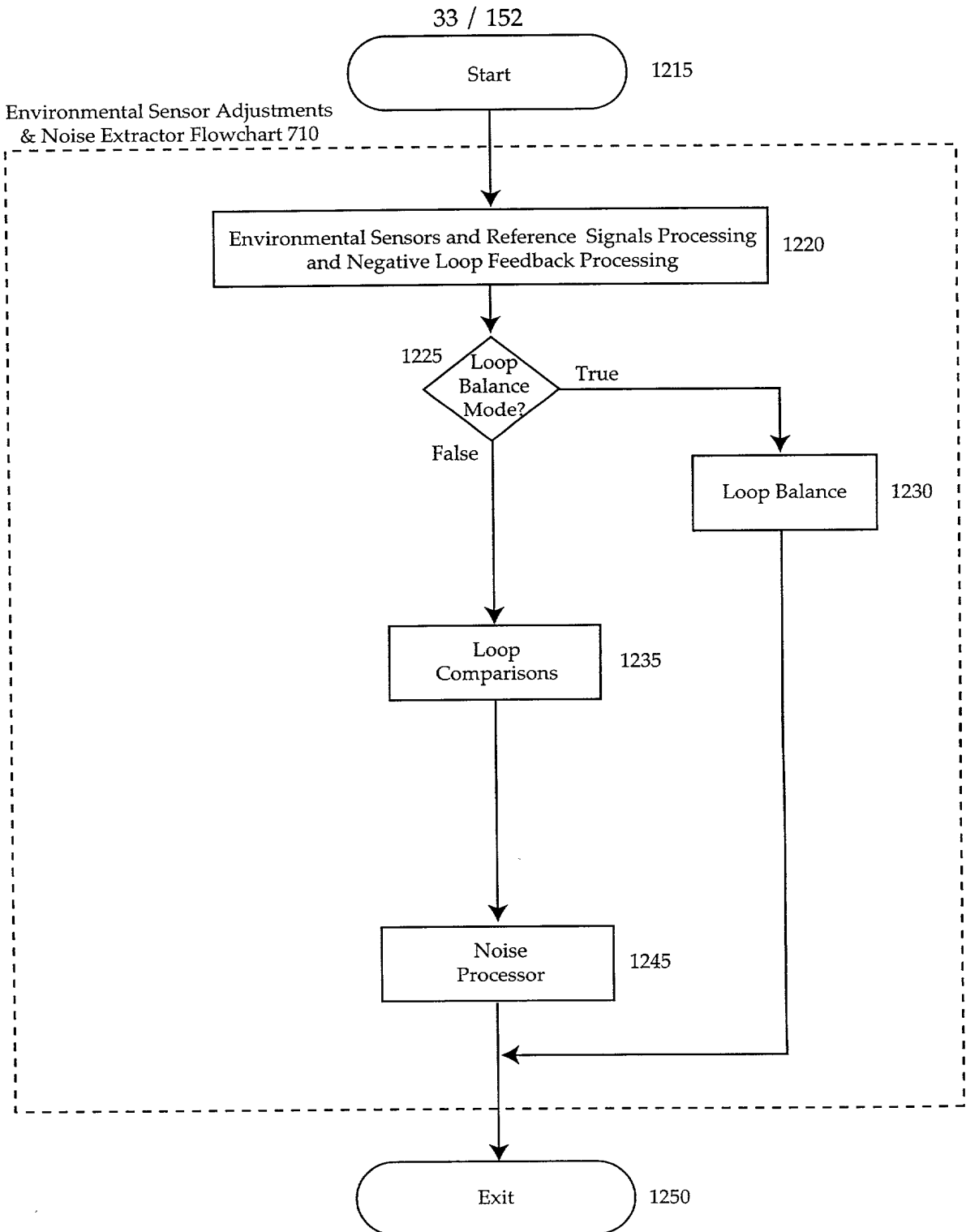
Environmental Sensor Adjustments
& Noise Extractor Flowchart 710

FIG. 12

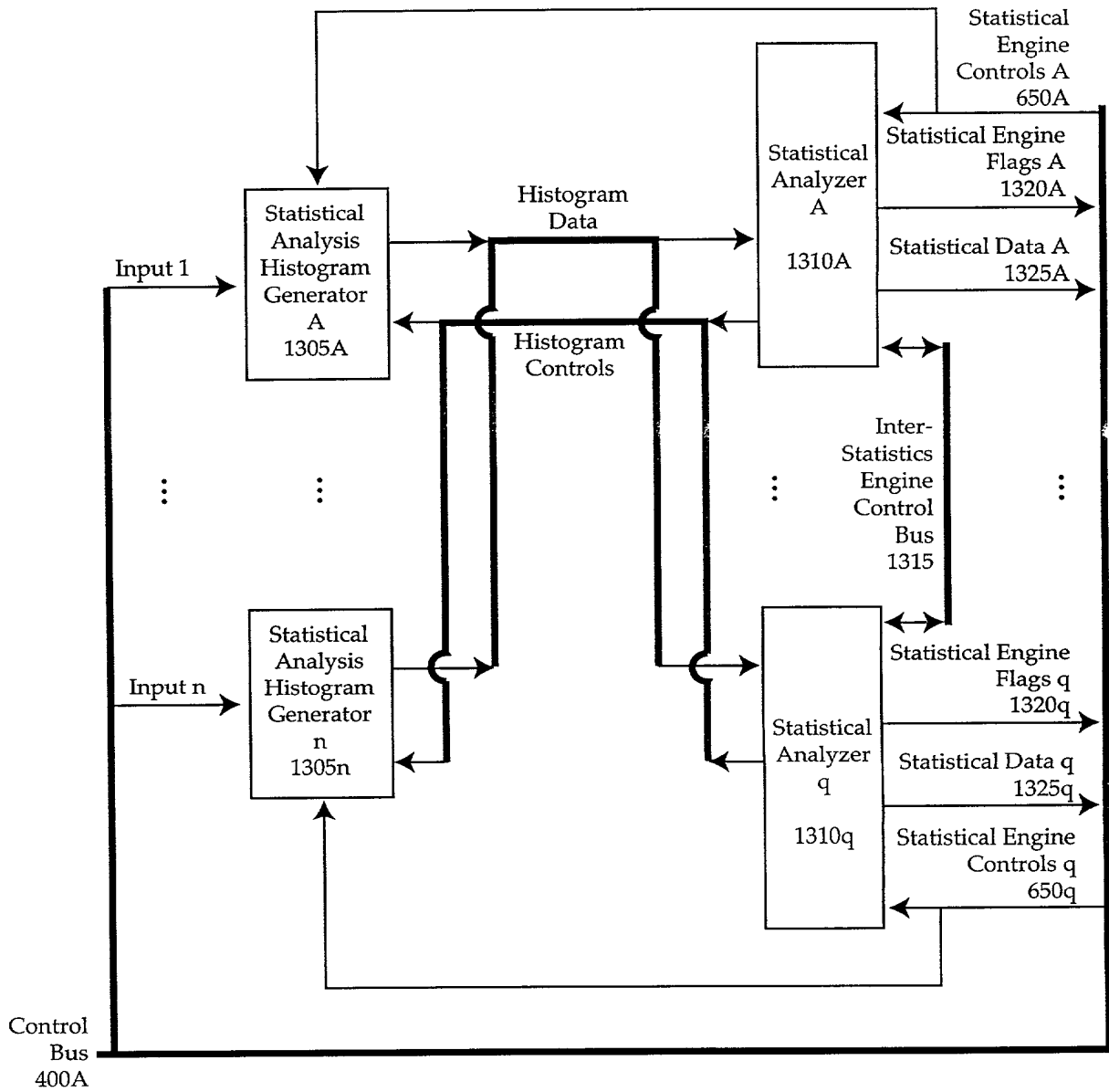


FIG. 13

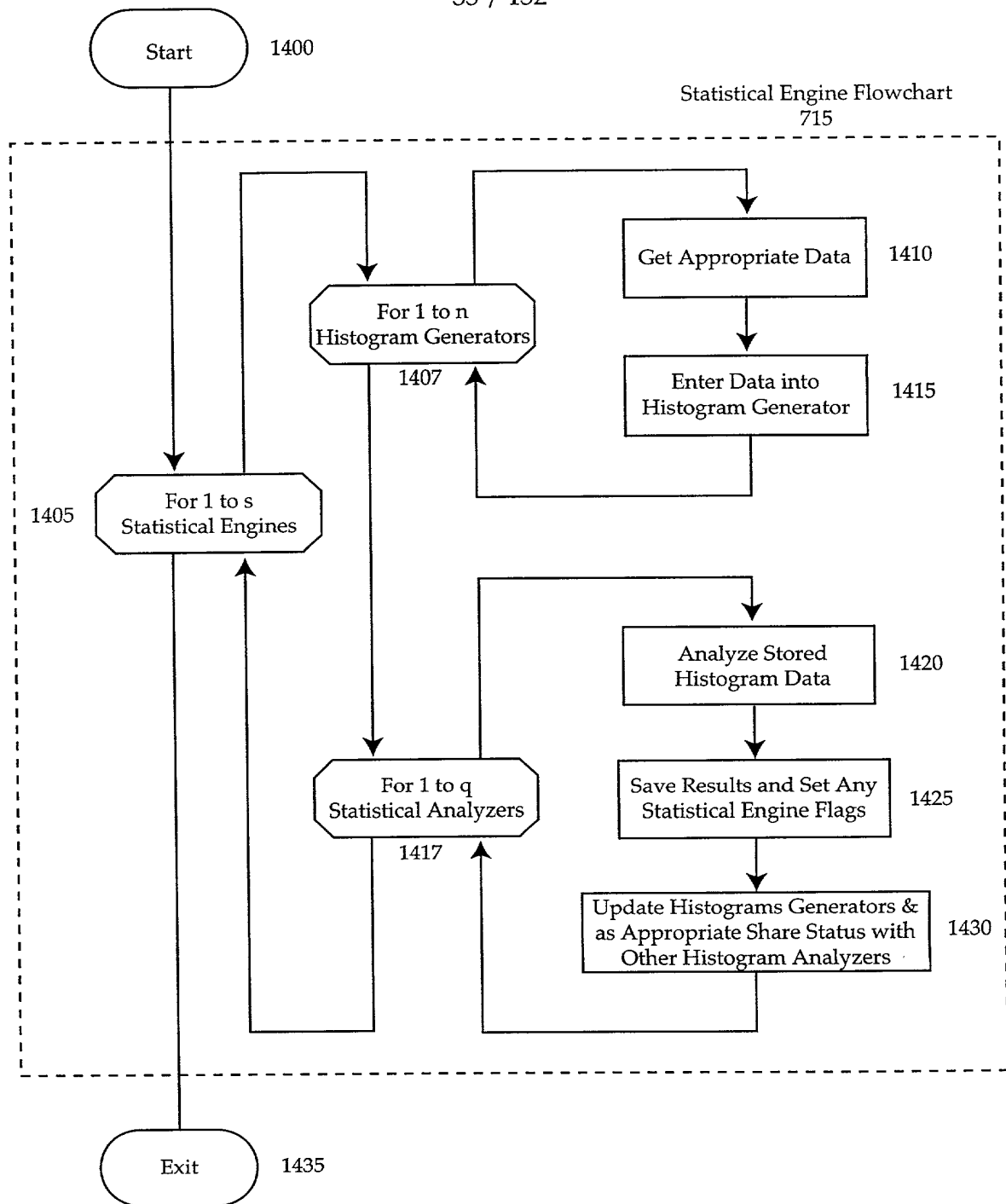


FIG. 14

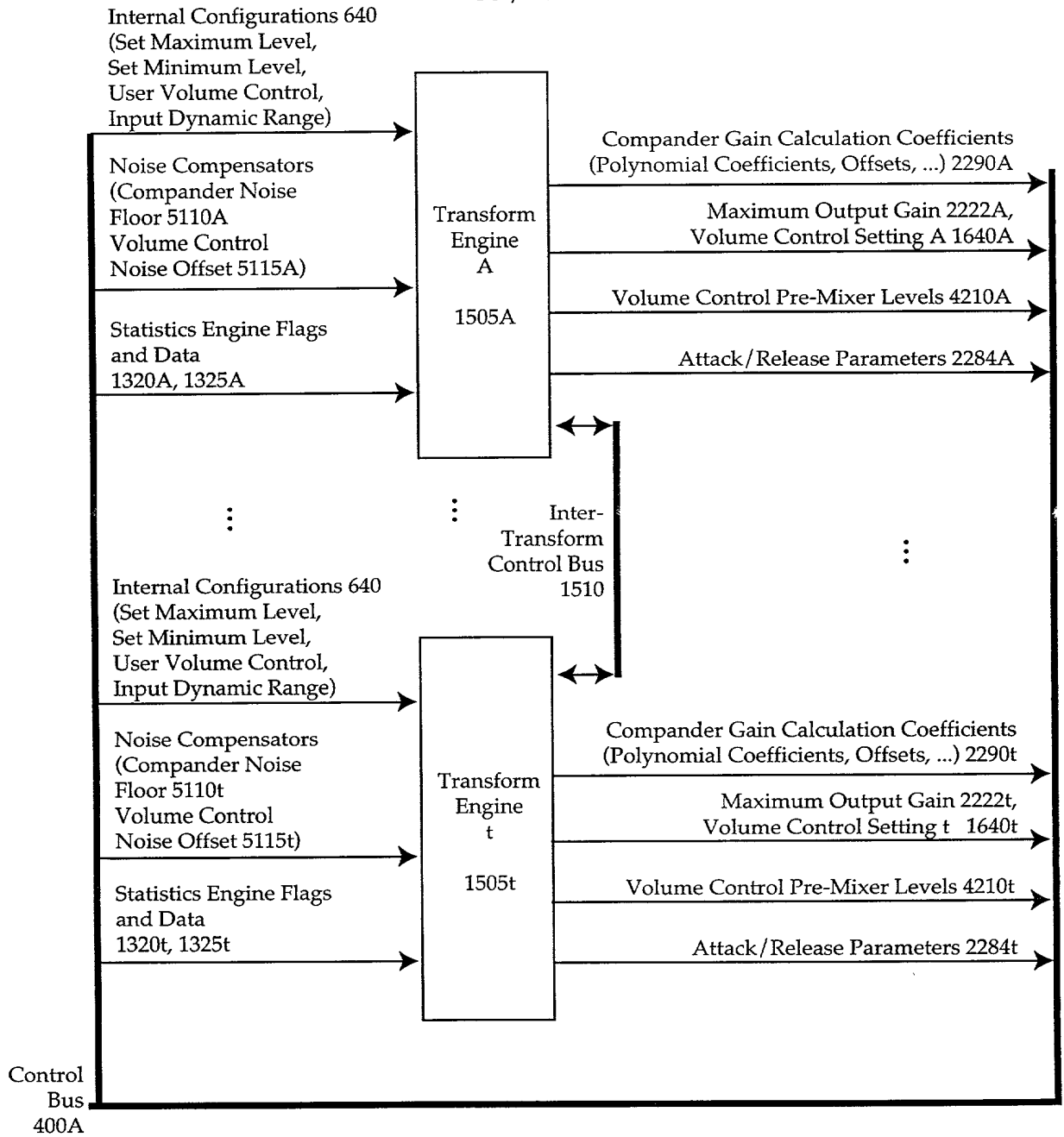


FIG. 15

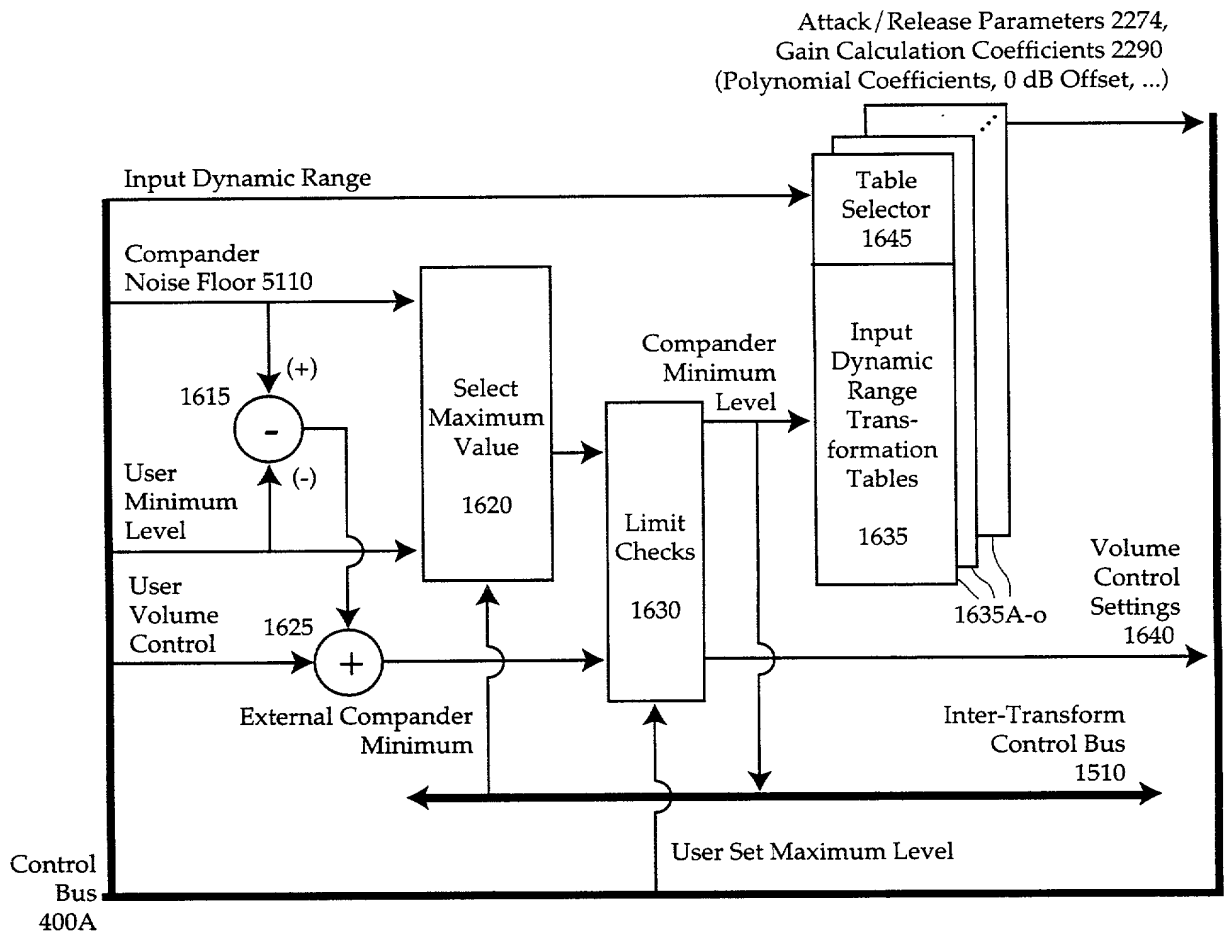


FIG. 16

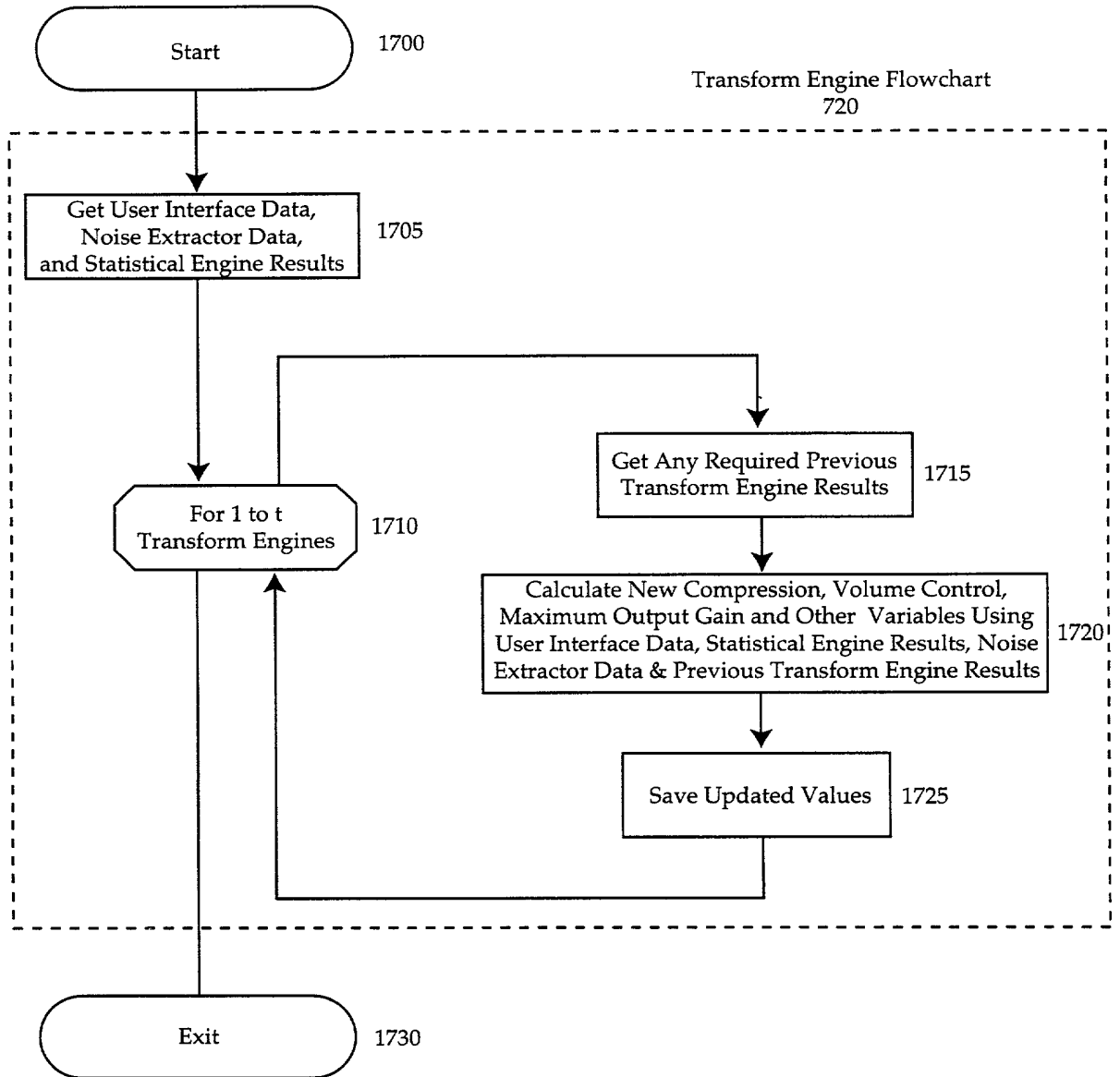


FIG. 17

Central Power Estimator Mixer Combiner
455

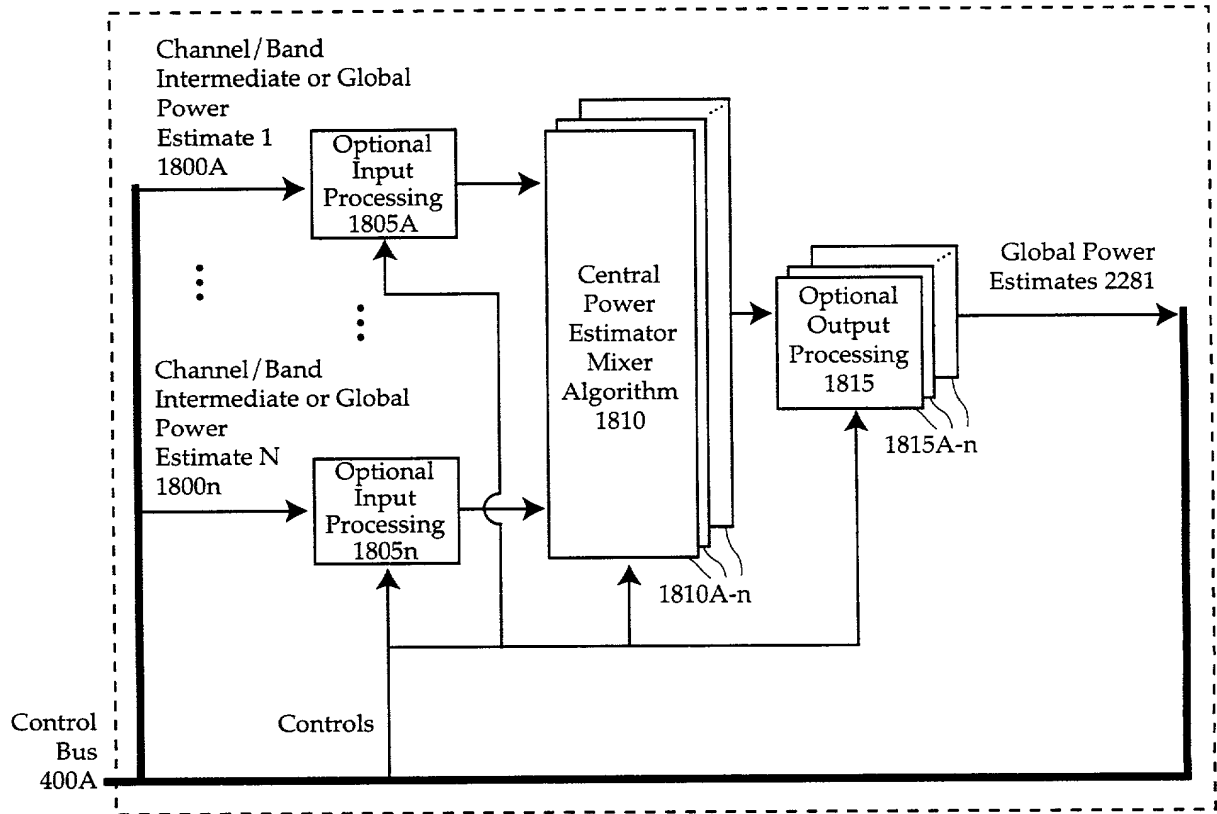


FIG. 18

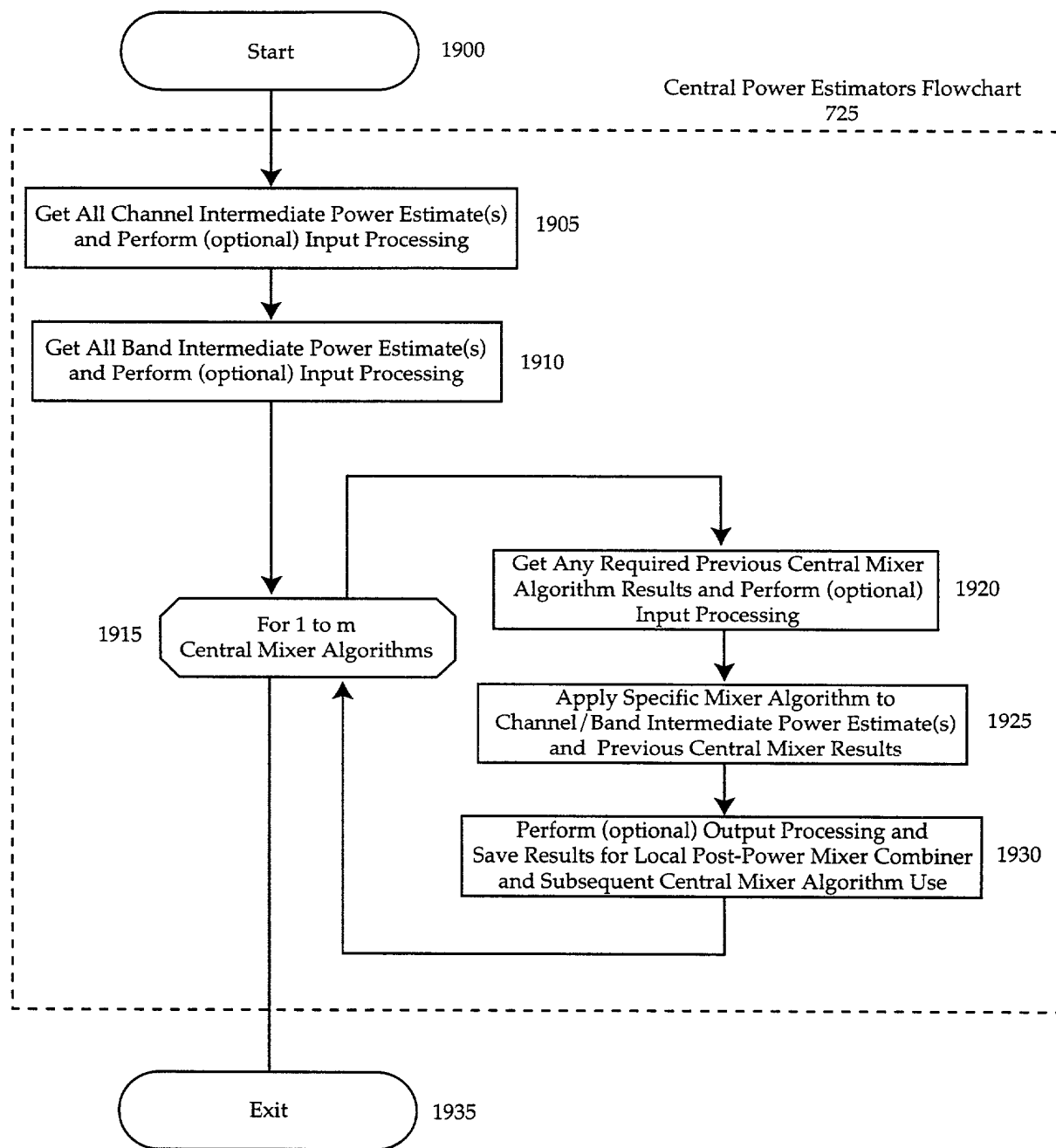


FIG. 19

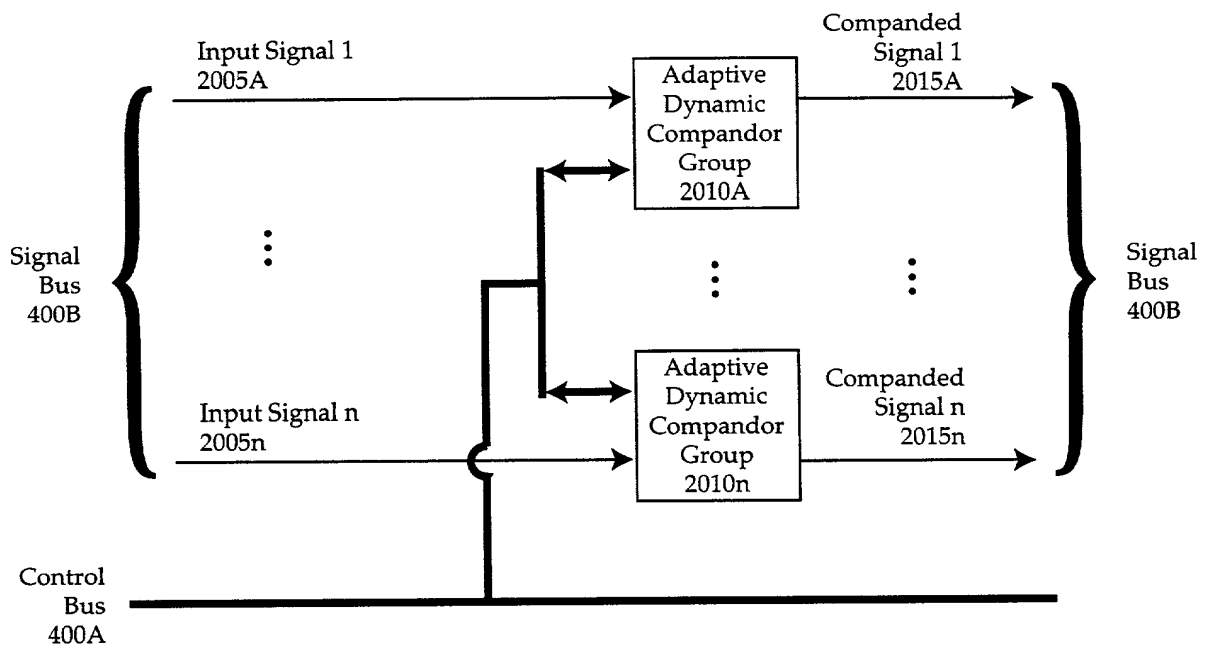


FIG. 20A

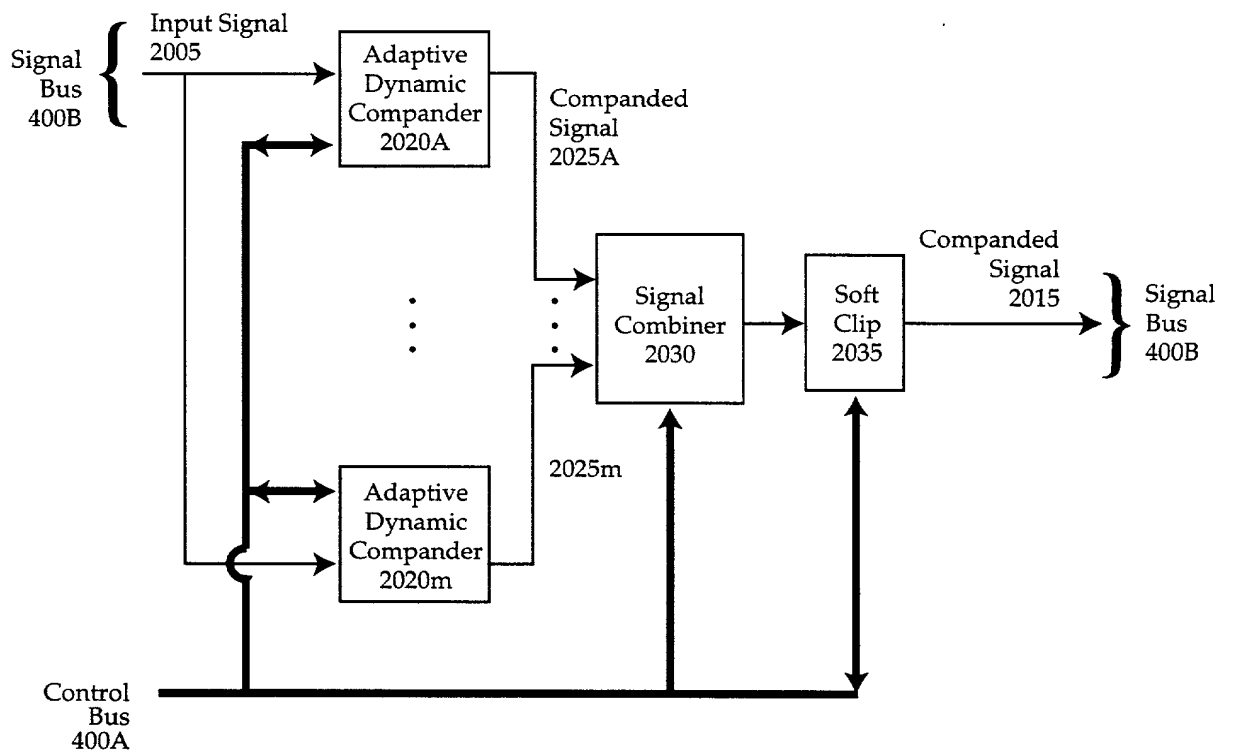


FIG. 20B

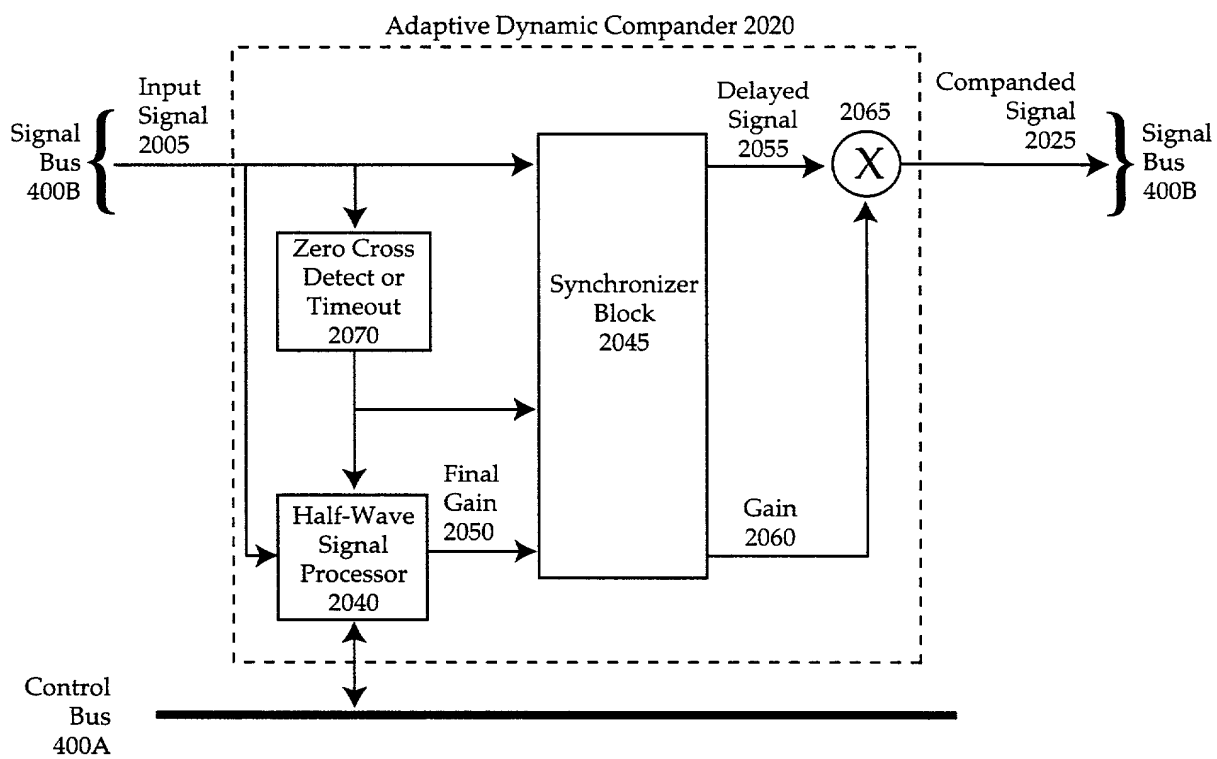


FIG. 20C

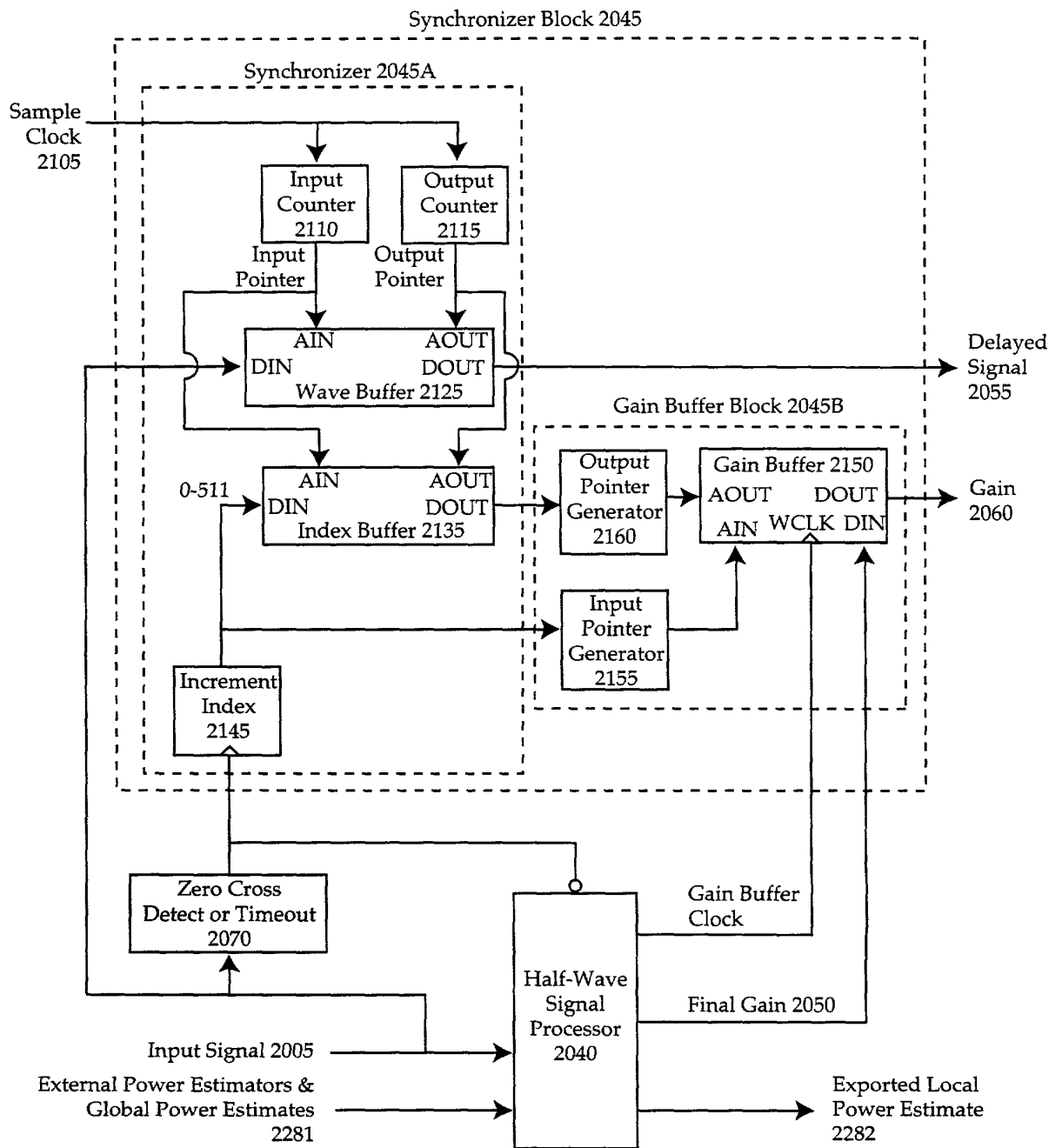


FIG. 21A

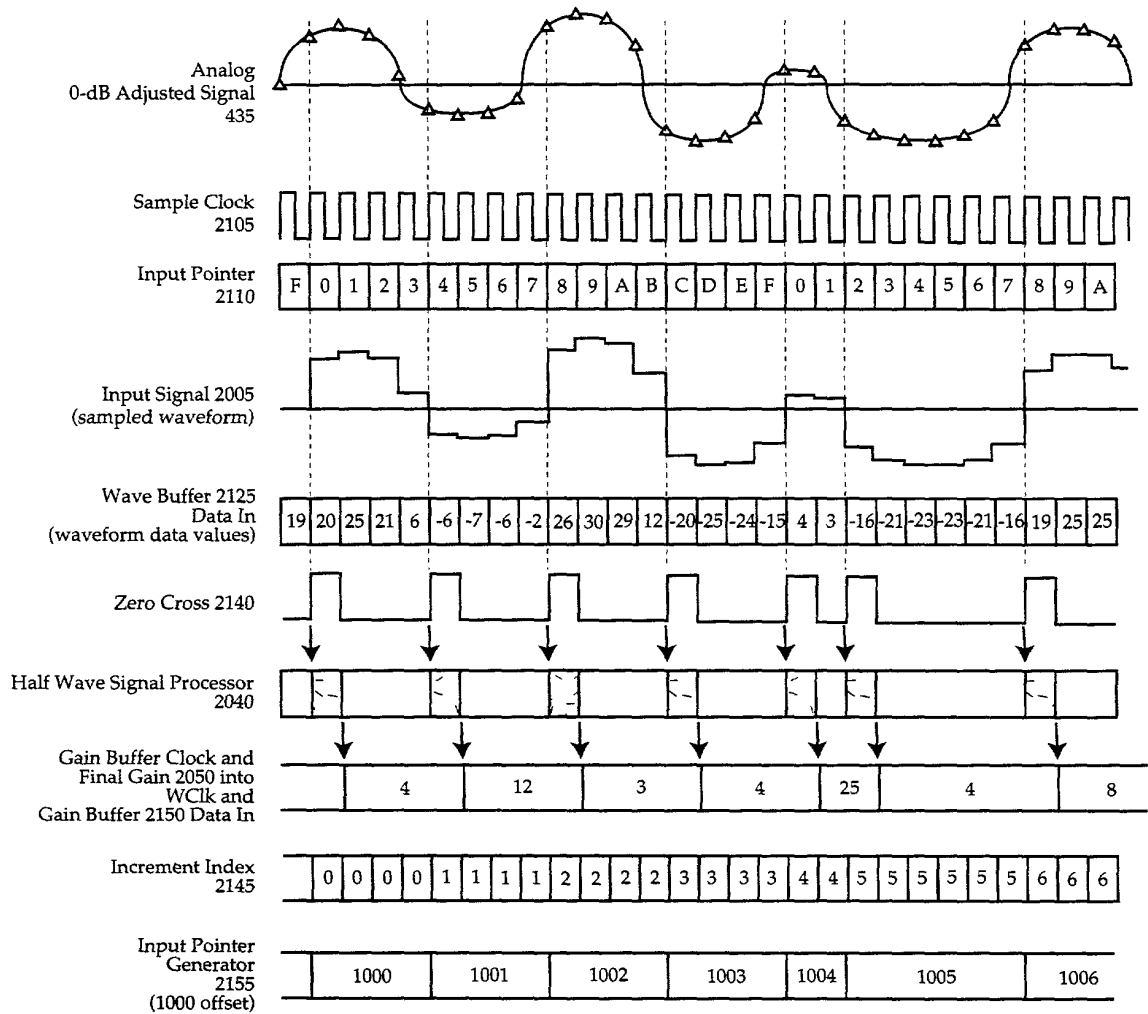


FIG. 21B

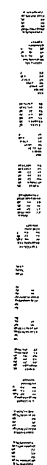


FIG. 21C

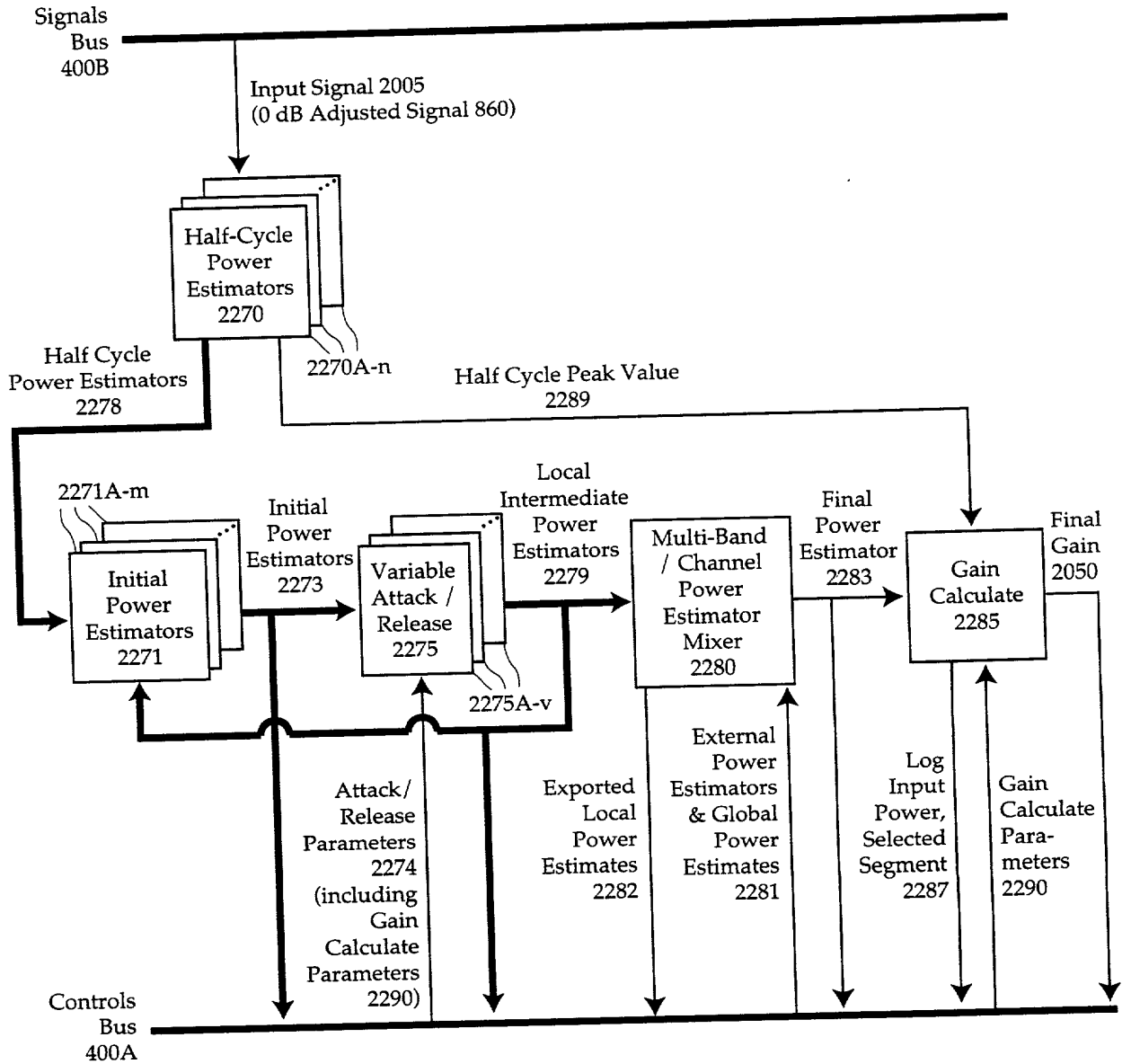


FIG. 22

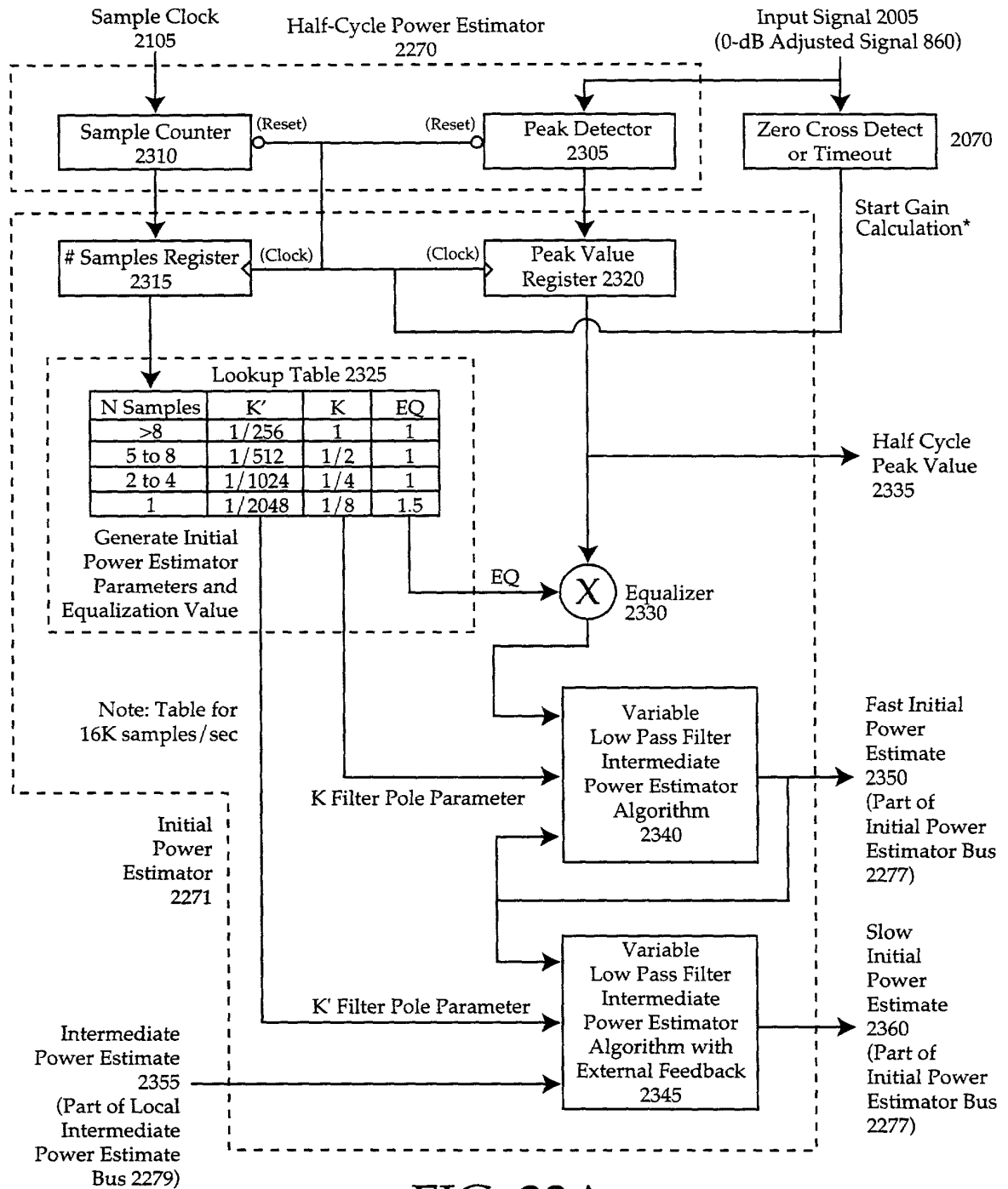


FIG. 23A

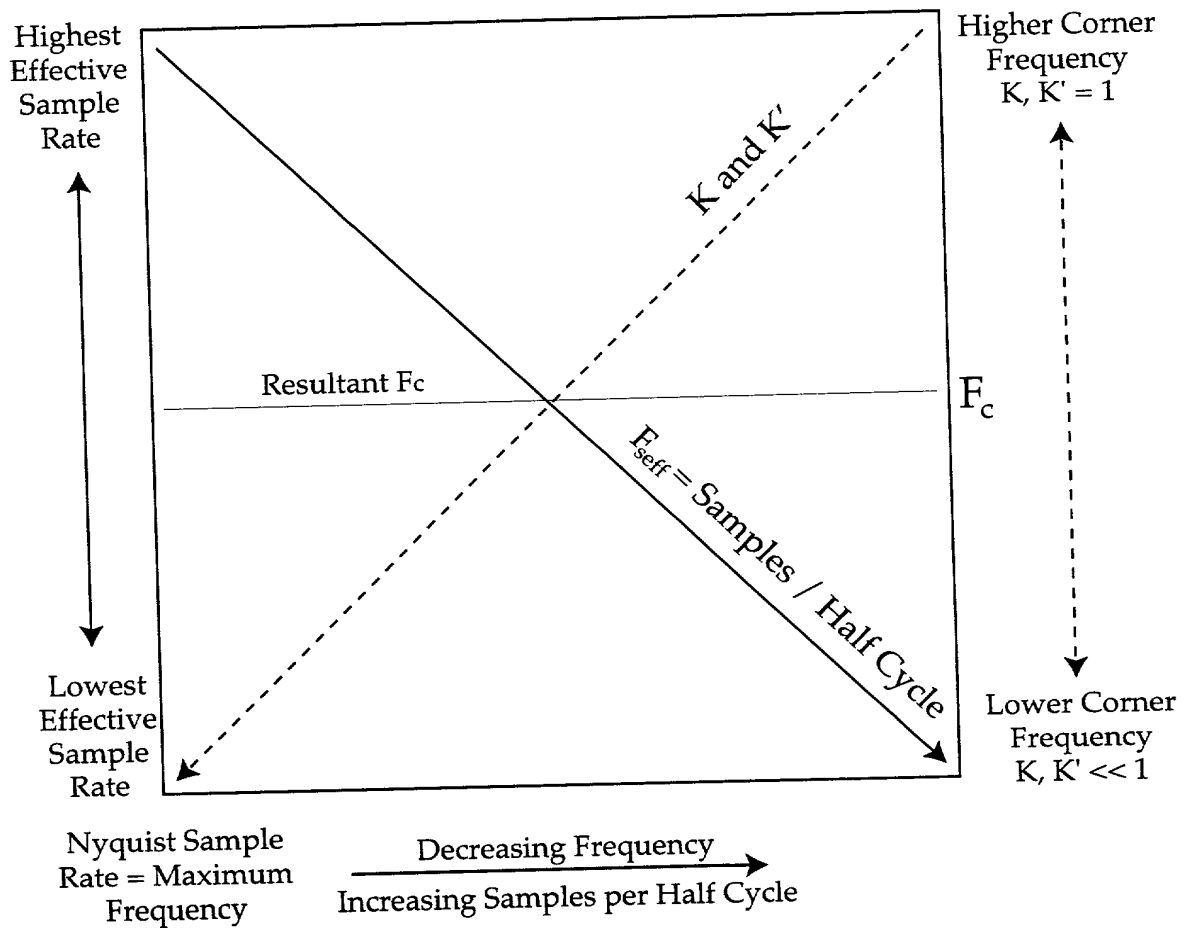
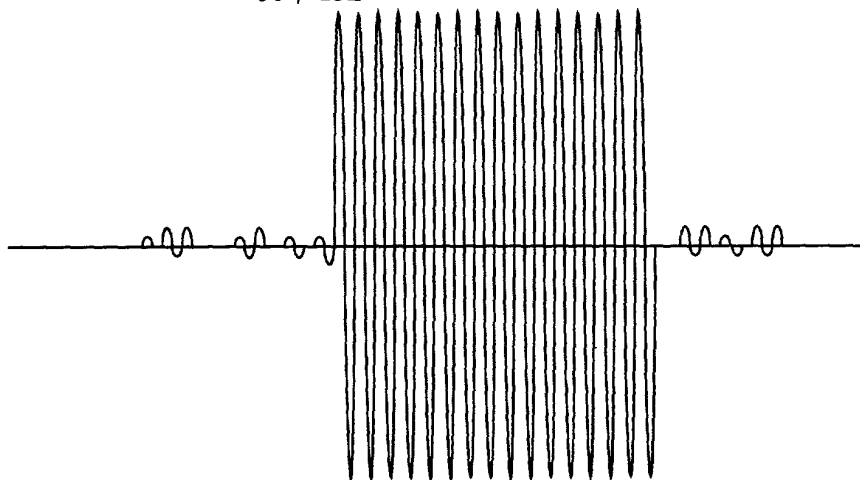


FIG. 23B

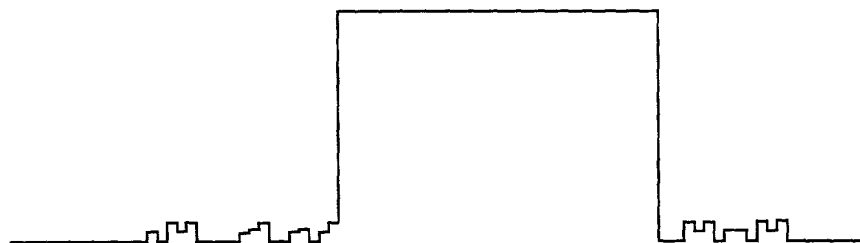
006277" 6926260

Input Signal
2005
(0-dB Adjusted
Signal 860)

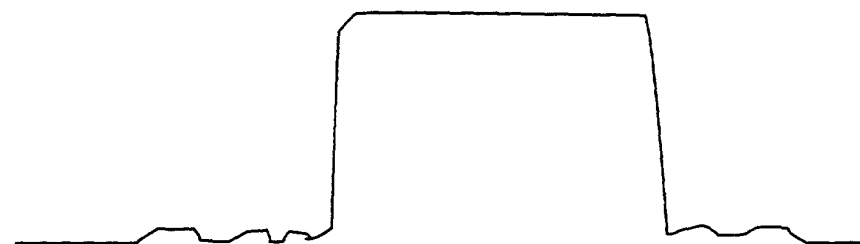
50 / 152



Half Cycle
Peak Value
2289



Fast Initial
Power Estimate
2350



Intermediate
Power
Estimate
2355

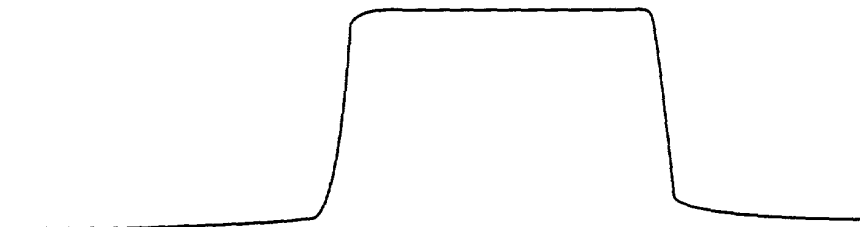


FIG. 23C

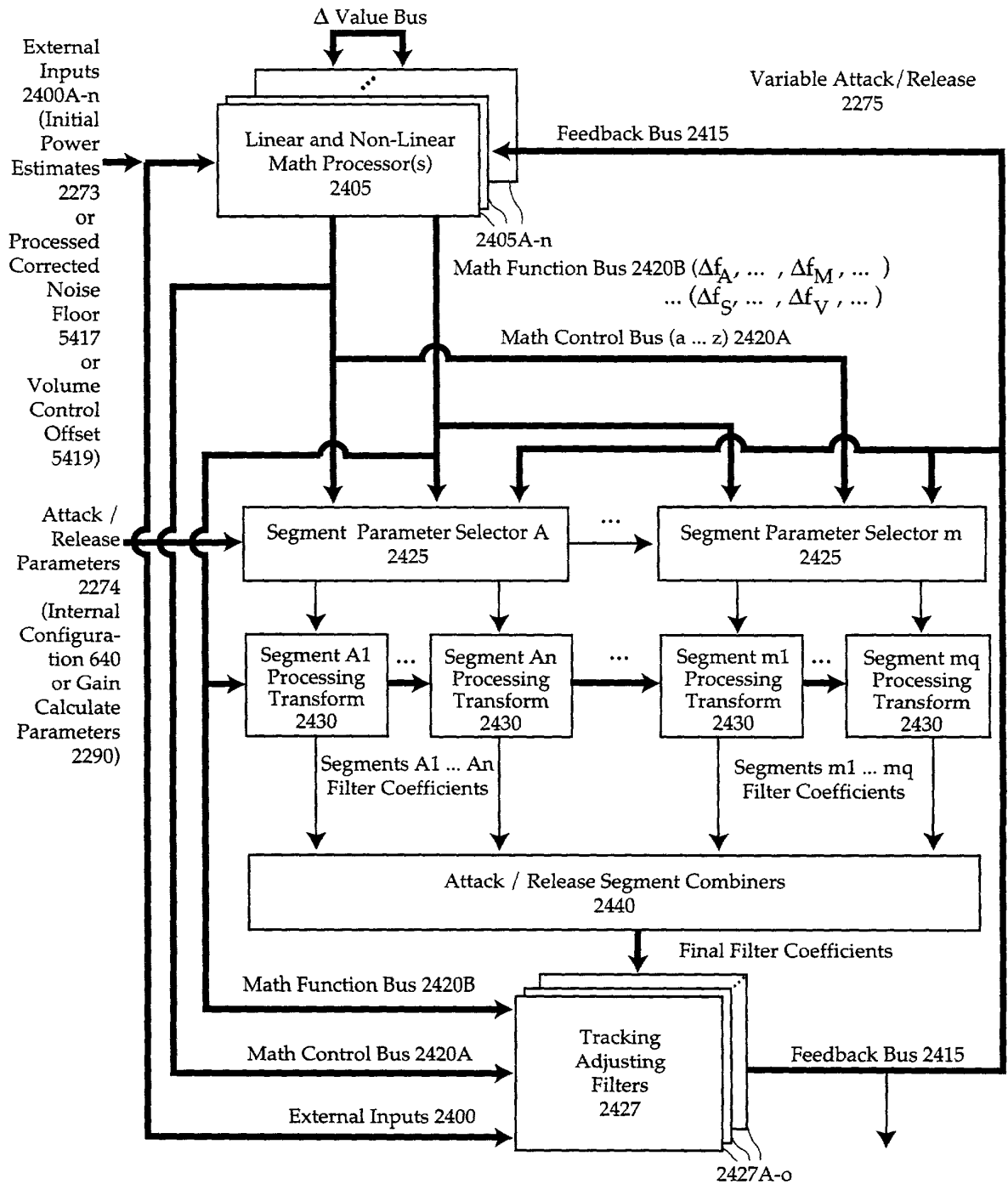


FIG. 24A

Local Intermediate Power Estimates 2279
or Long Duration Noise Floor 5425
or Long Duration Noise Offset 5427

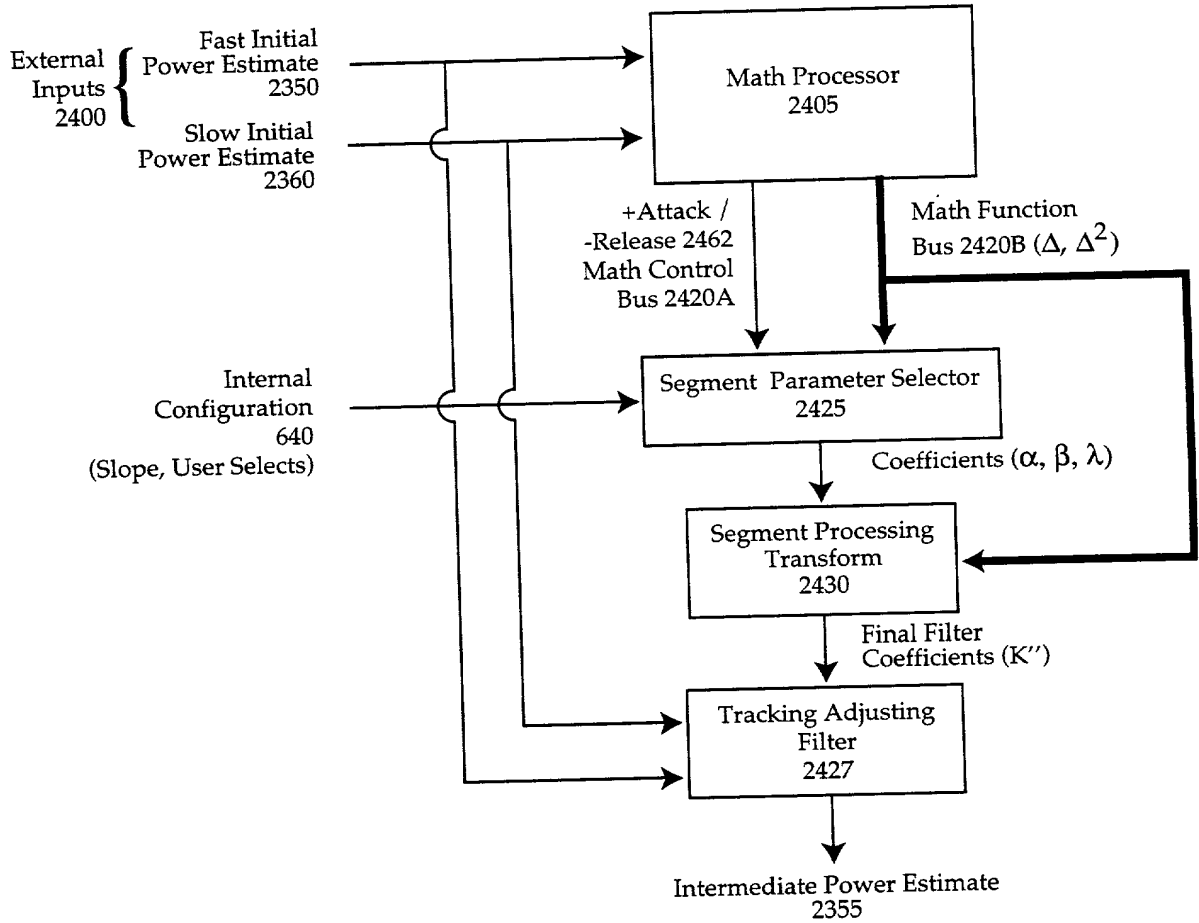
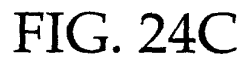


FIG. 24B



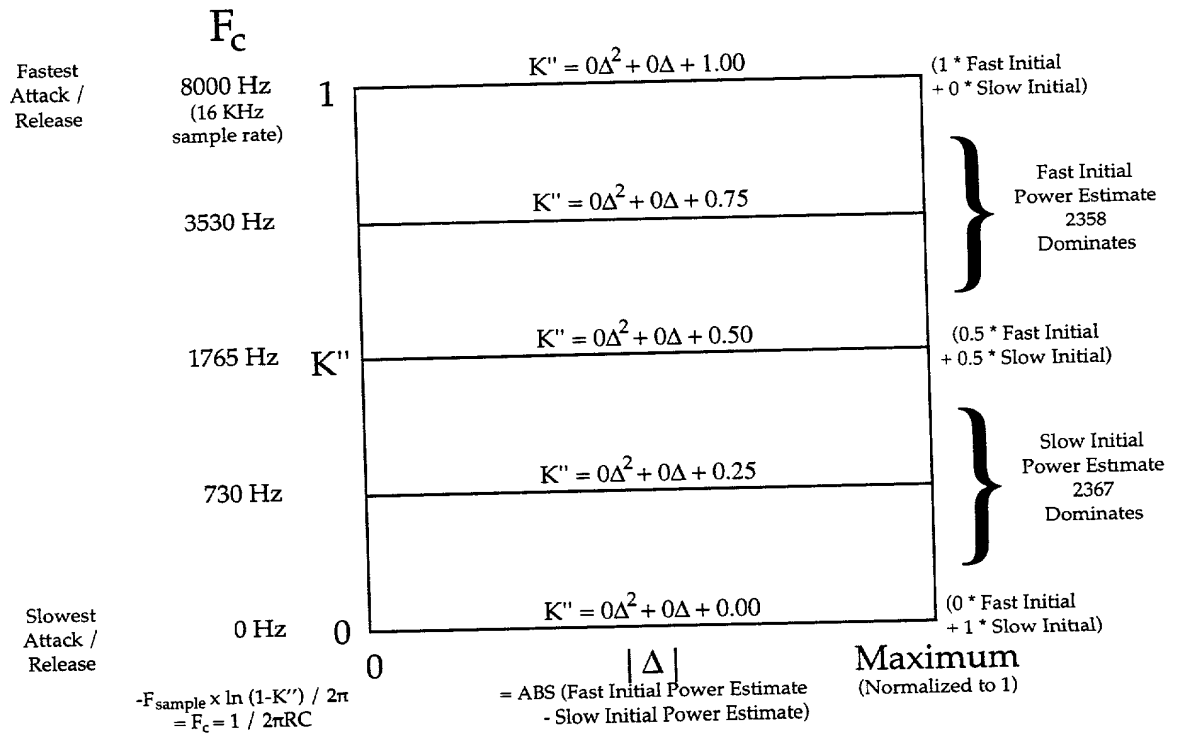


FIG. 24D

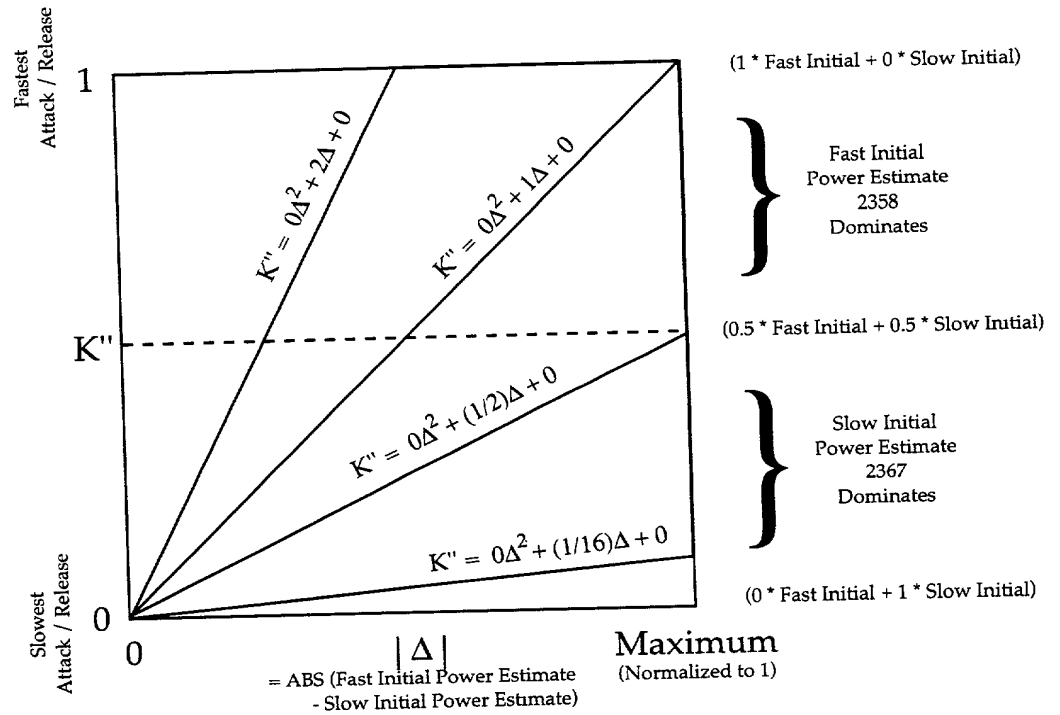


FIG. 24E

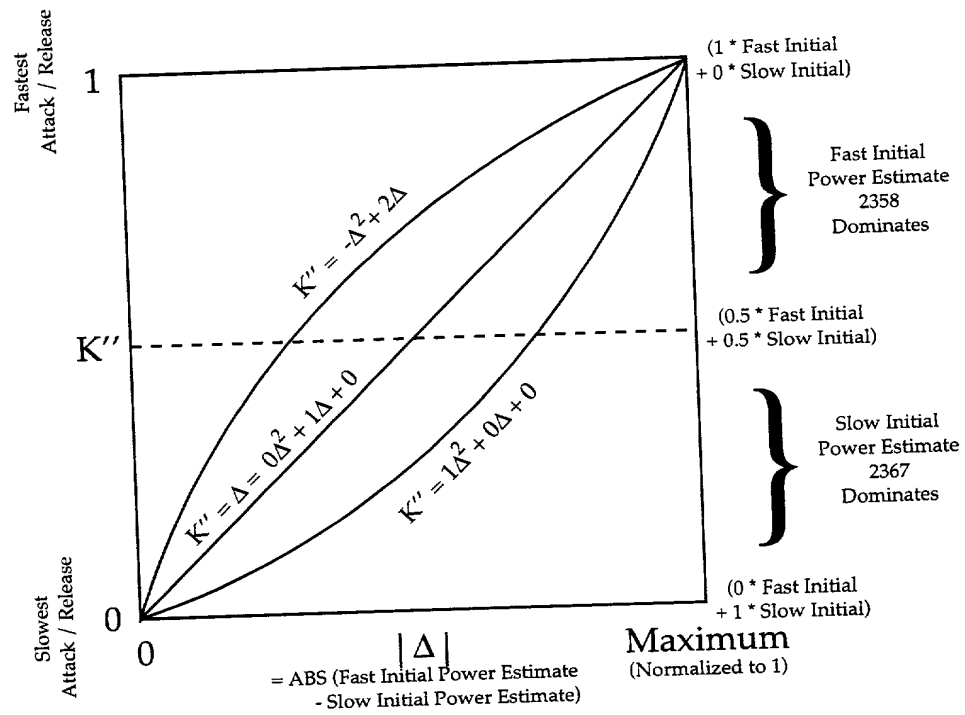


FIG. 24F

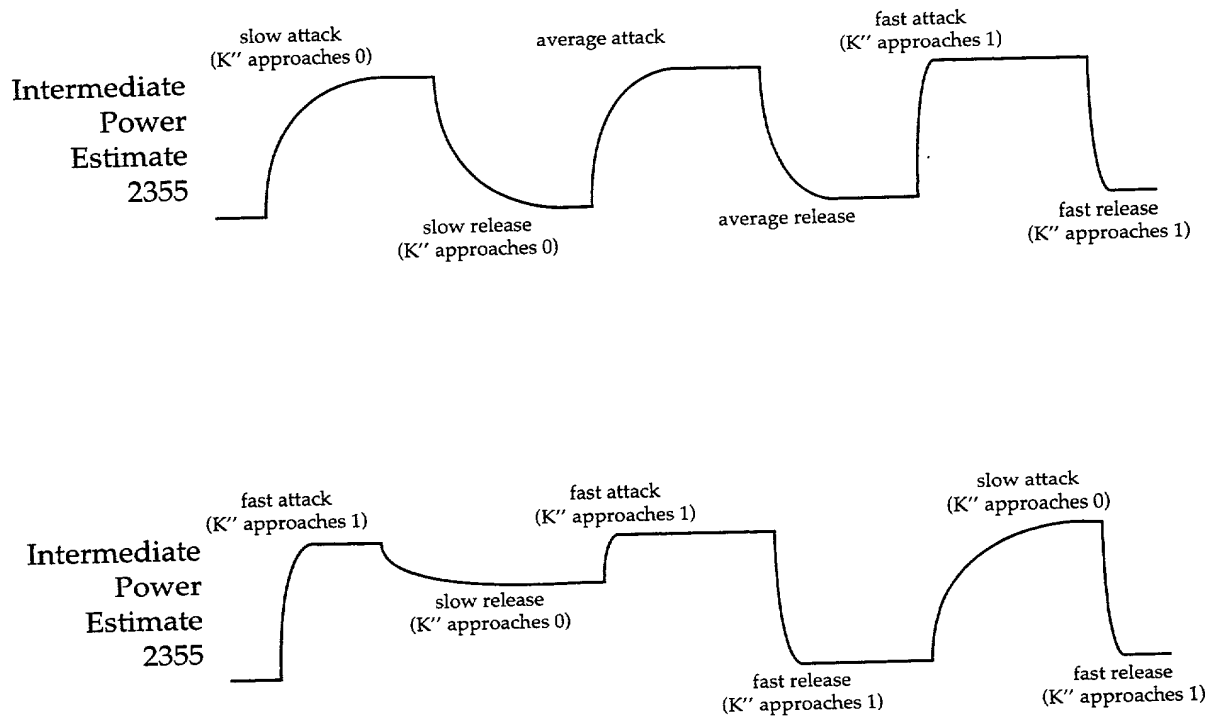


FIG. 24G

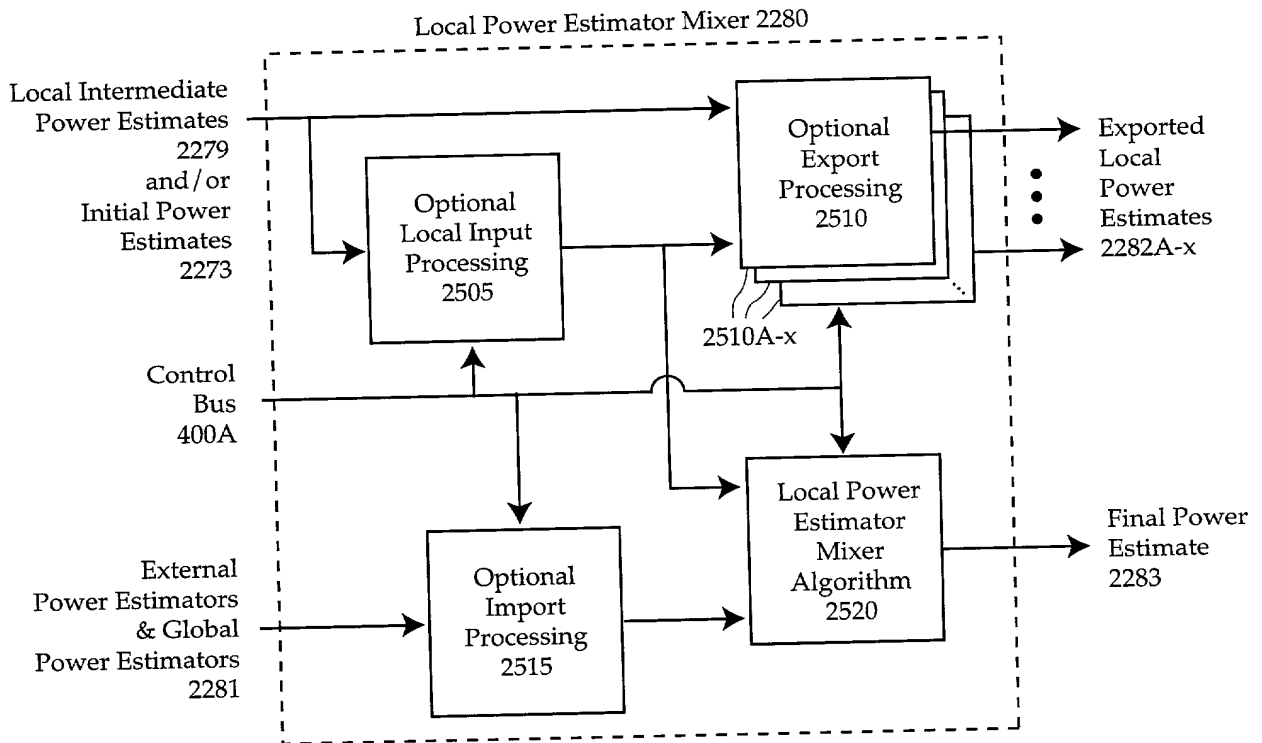


FIG. 25A

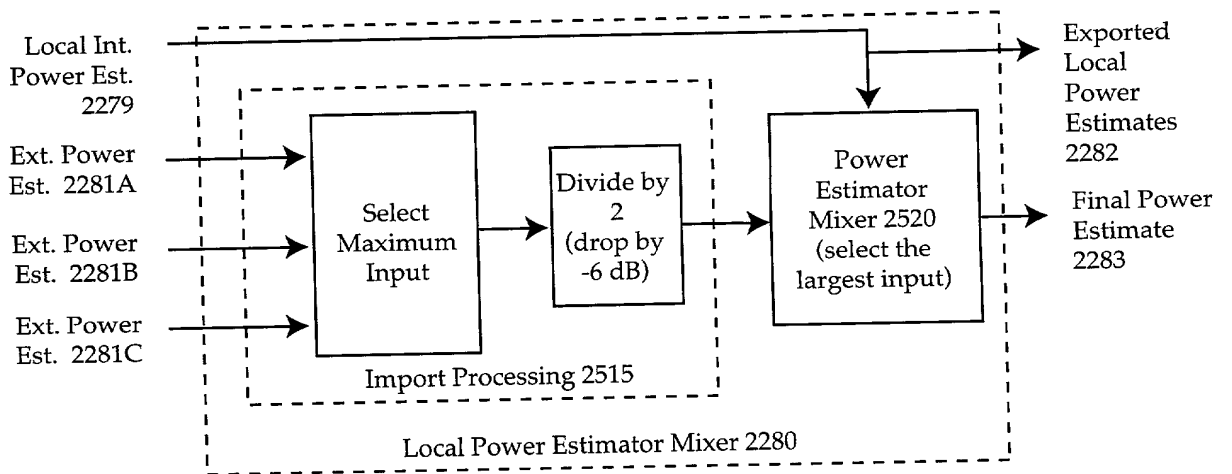


FIG. 25B

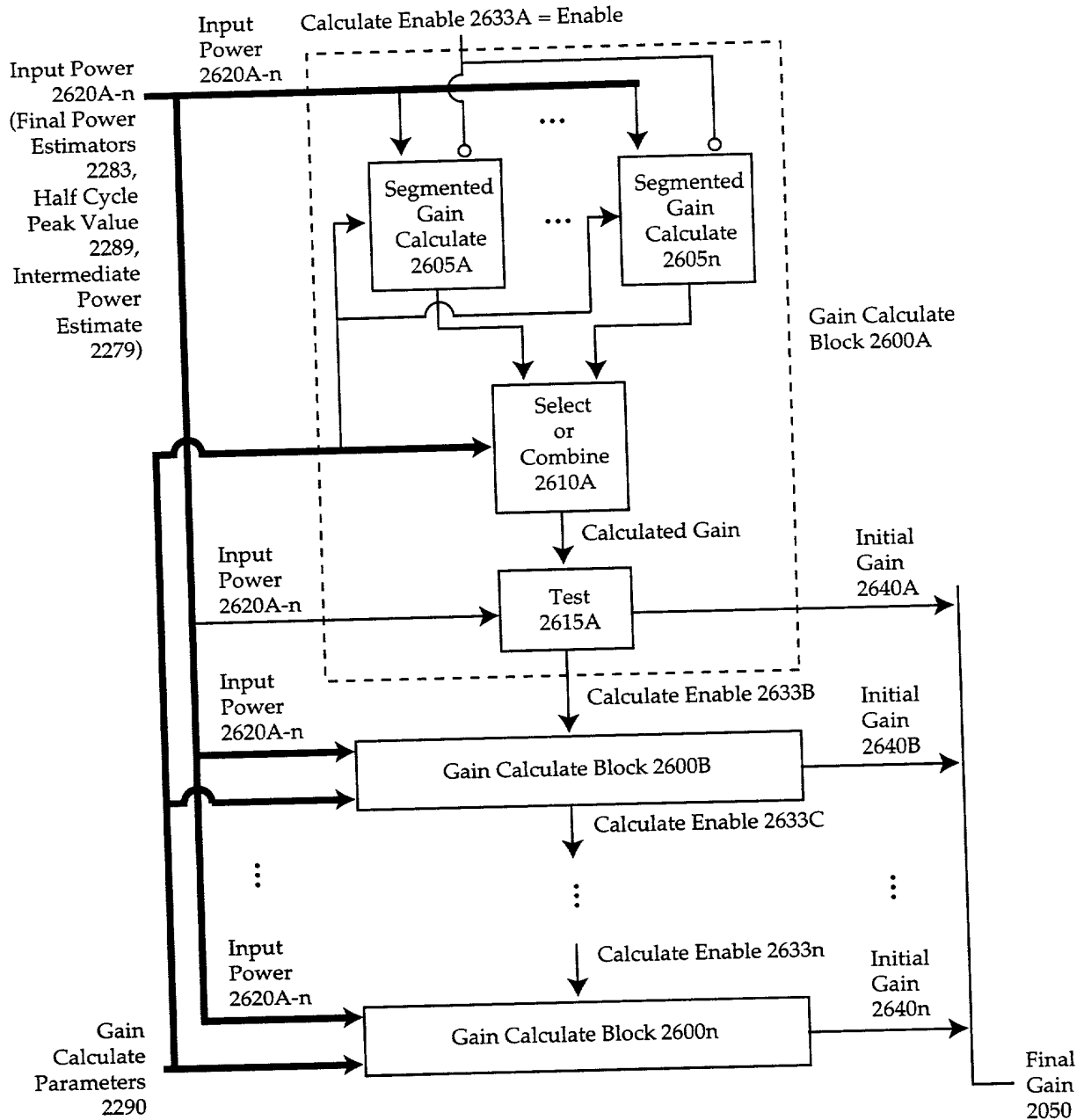


FIG. 26A

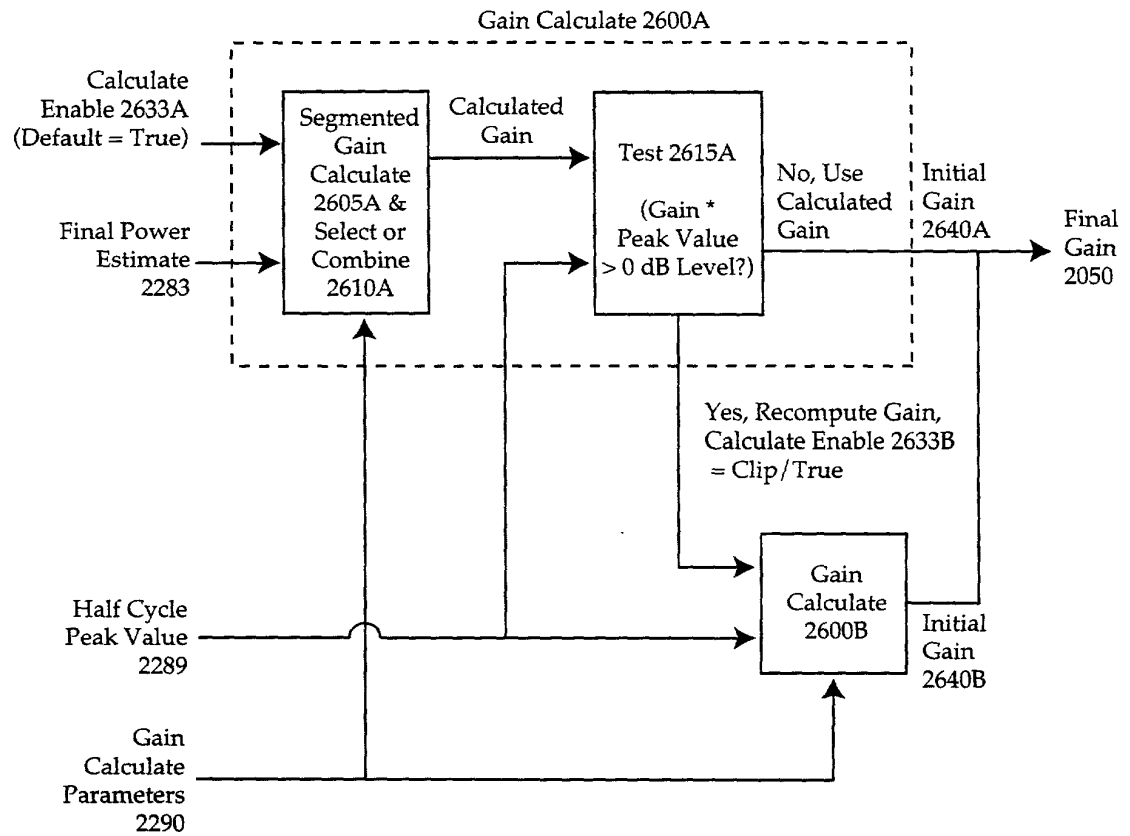


FIG. 26B

0972369-112900

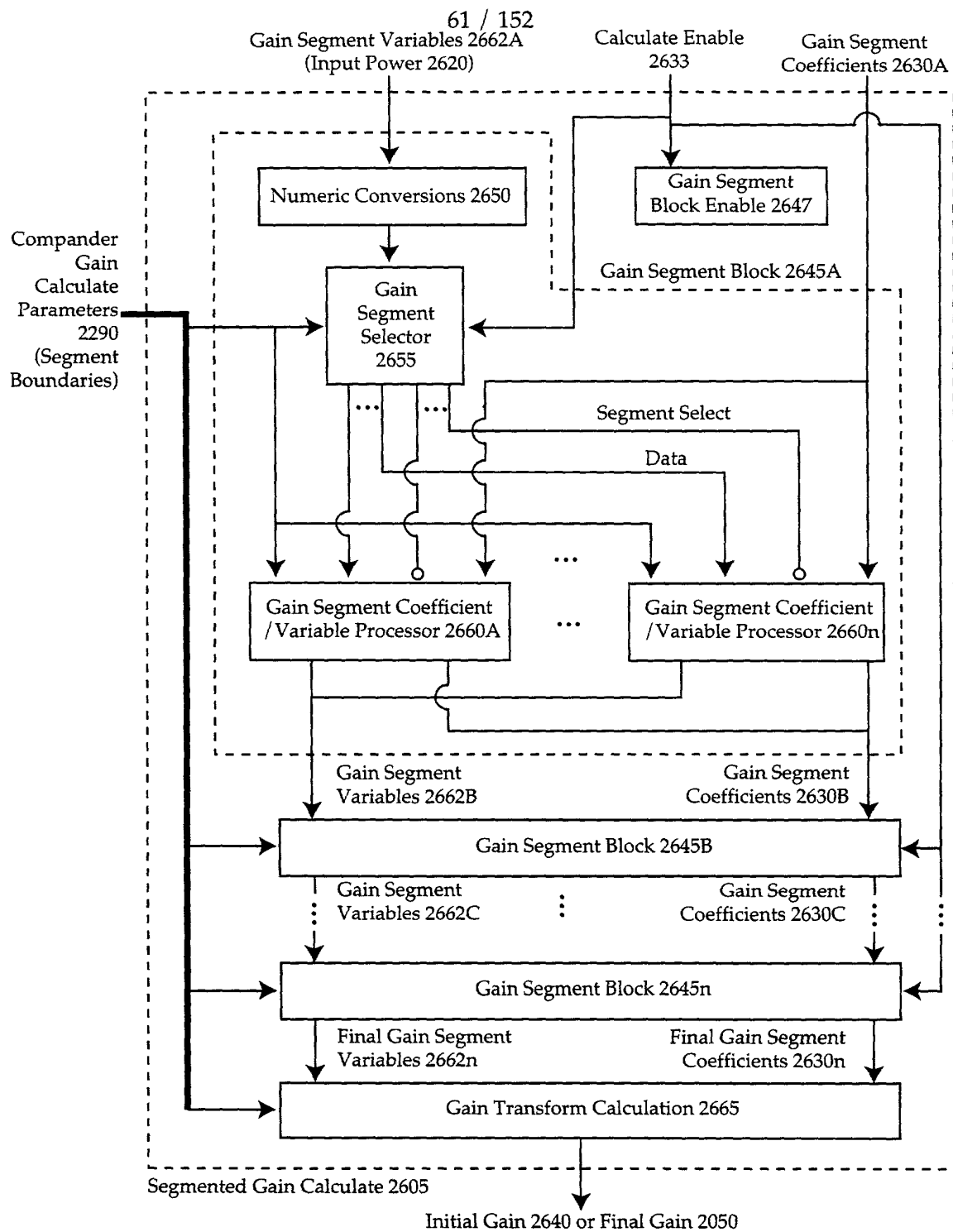


FIG. 26C

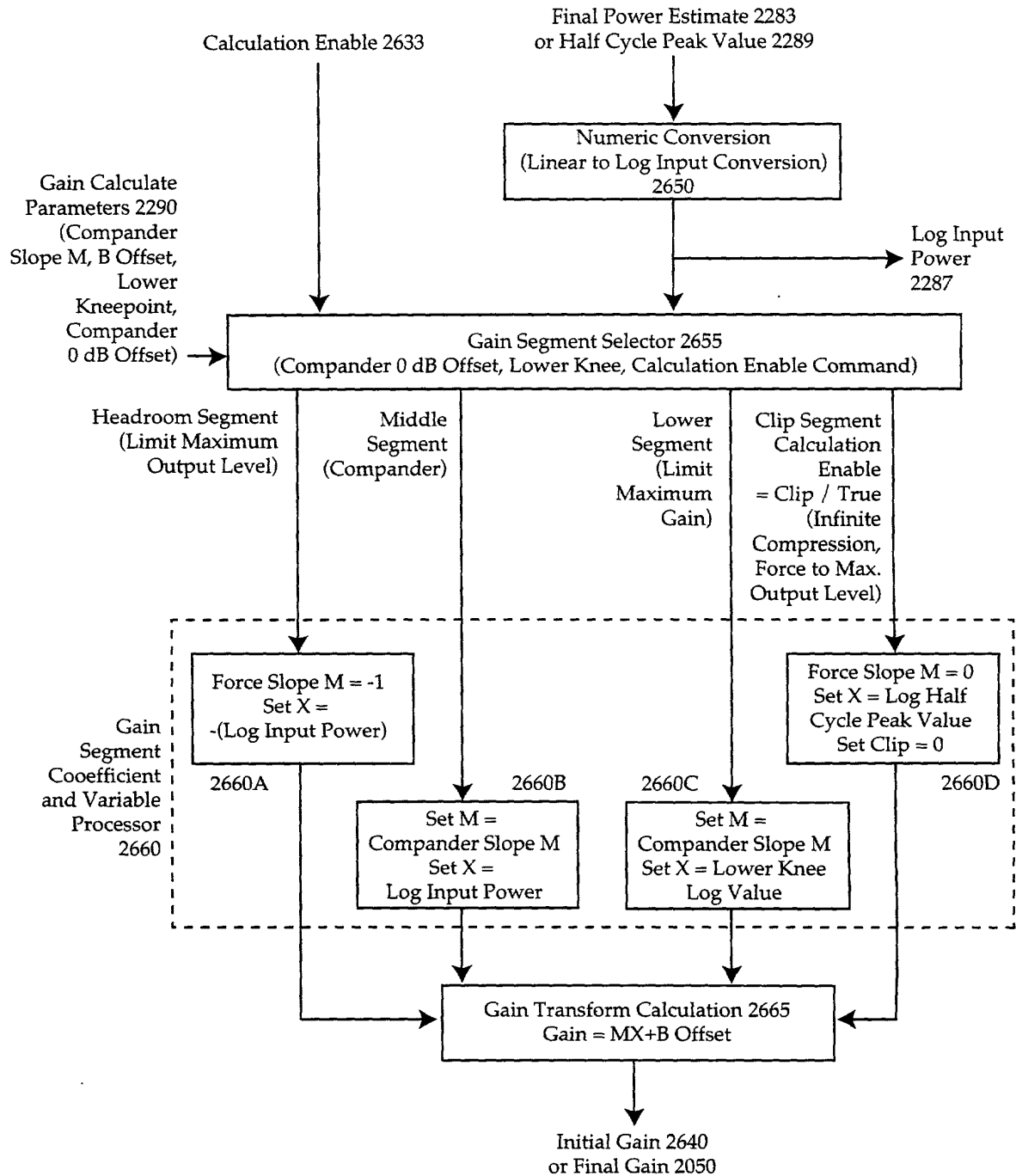


FIG. 26D

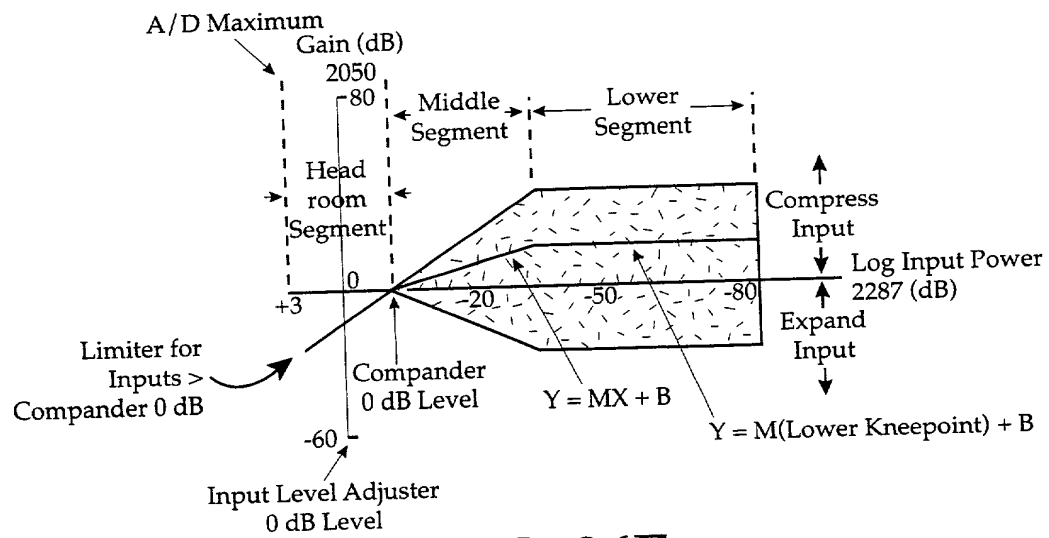


FIG. 26E

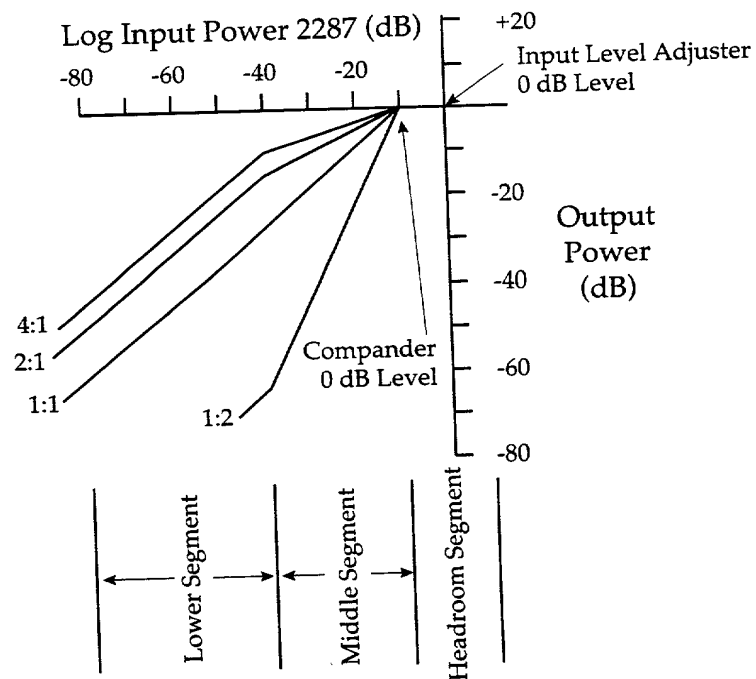


FIG. 26F

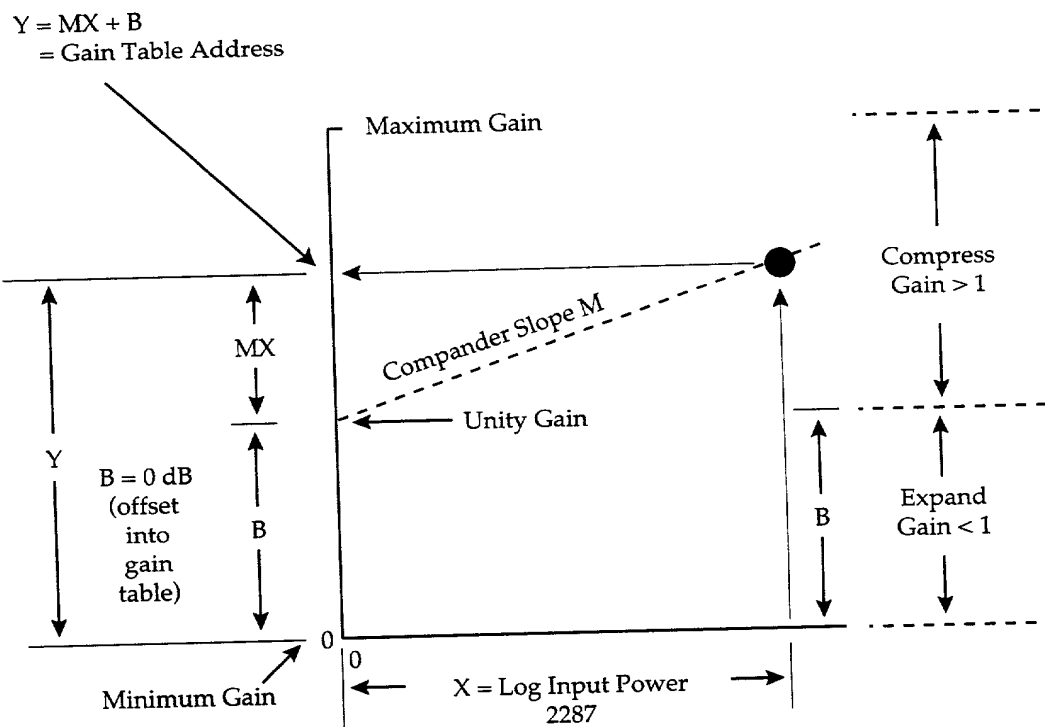


FIG. 26G

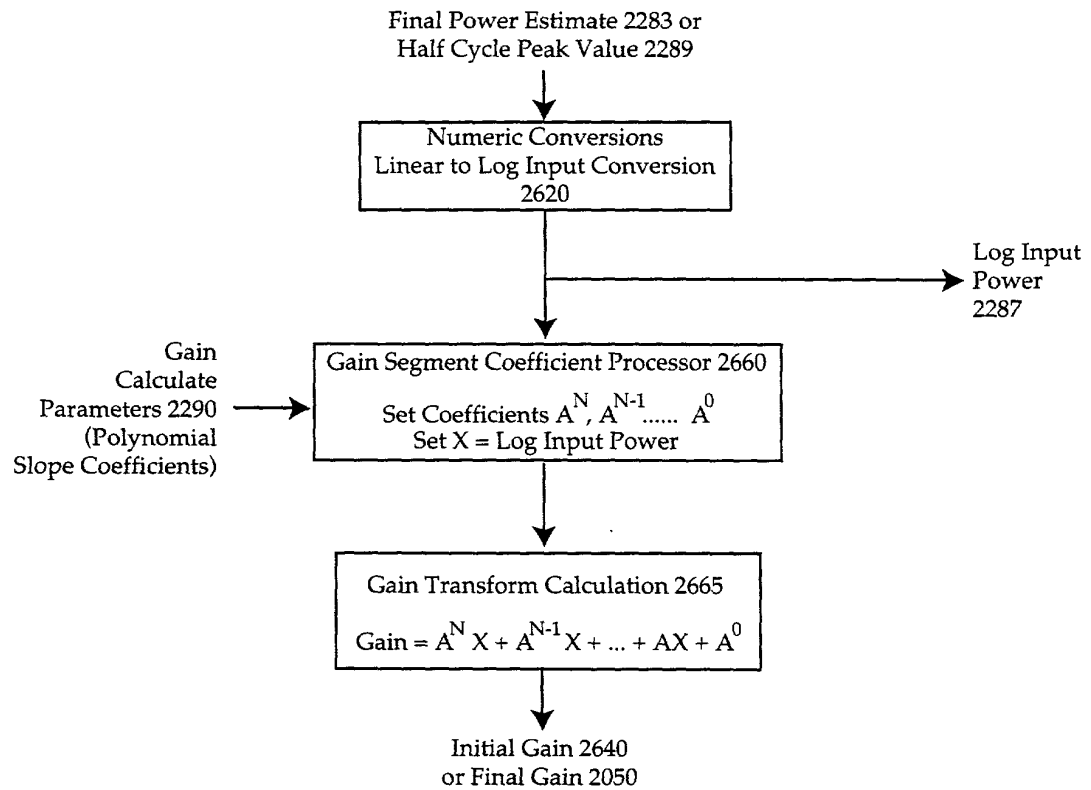


FIG. 26H

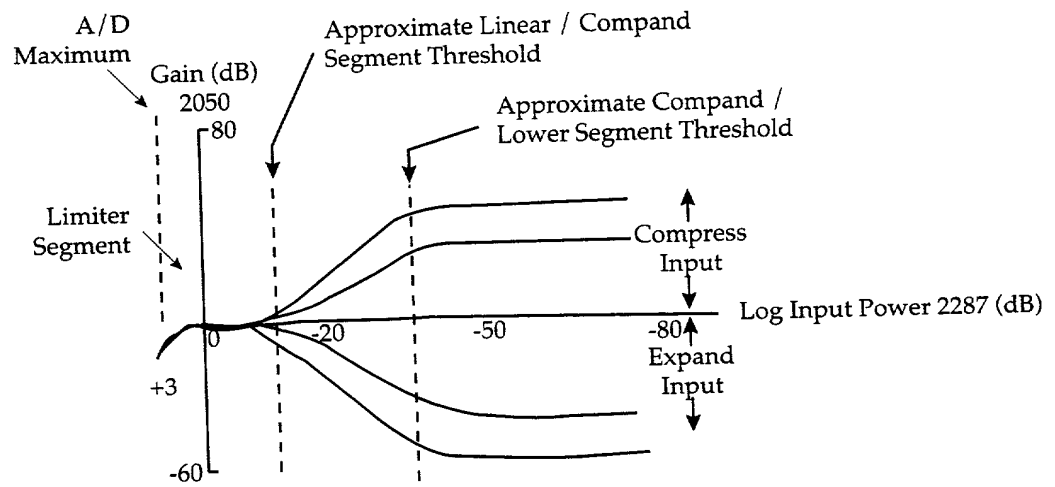


FIG. 26I

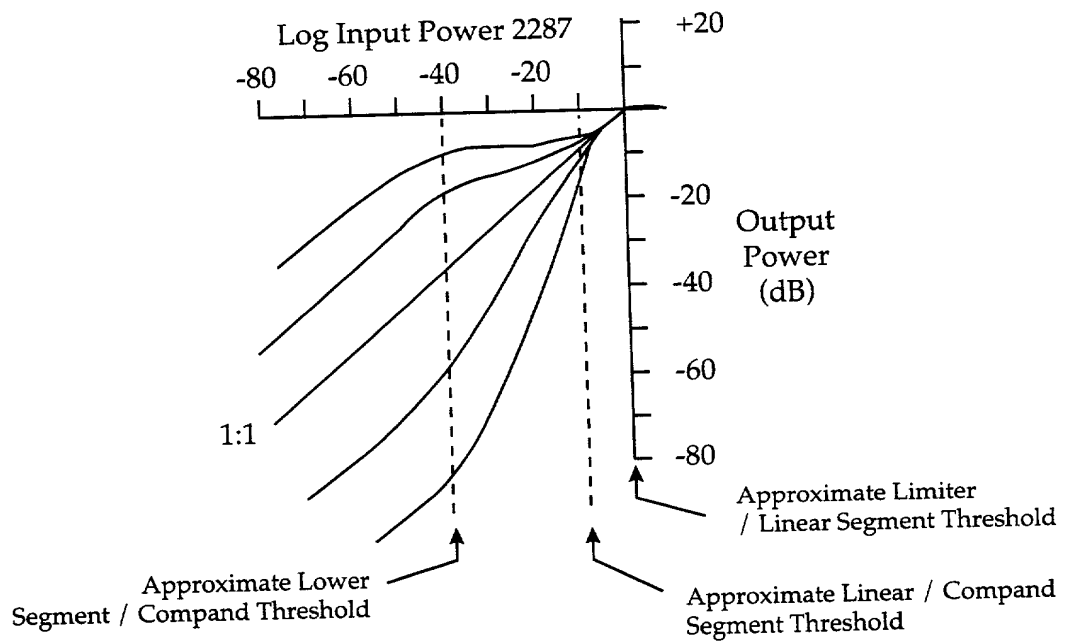


FIG. 26J

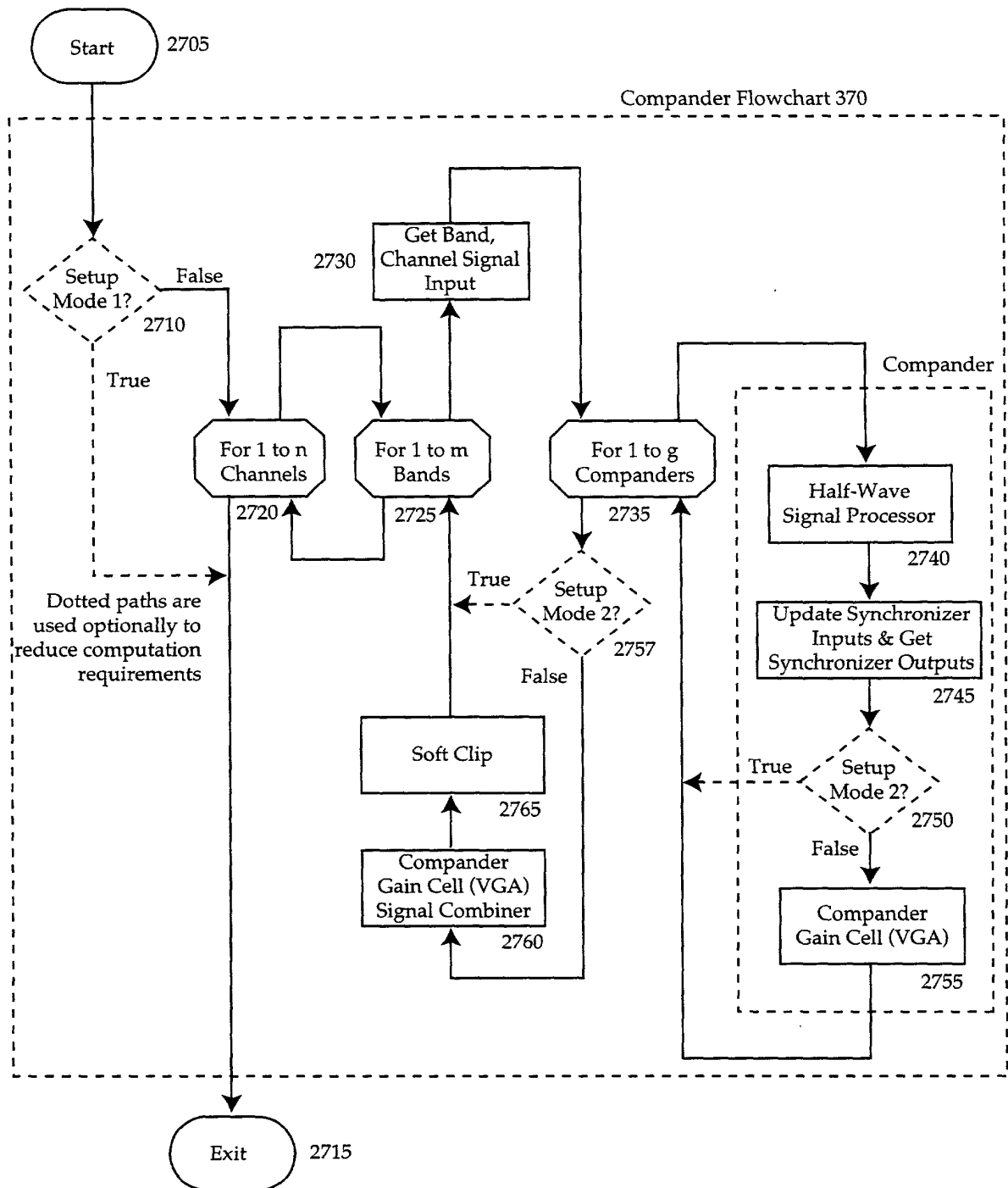


FIG. 27A

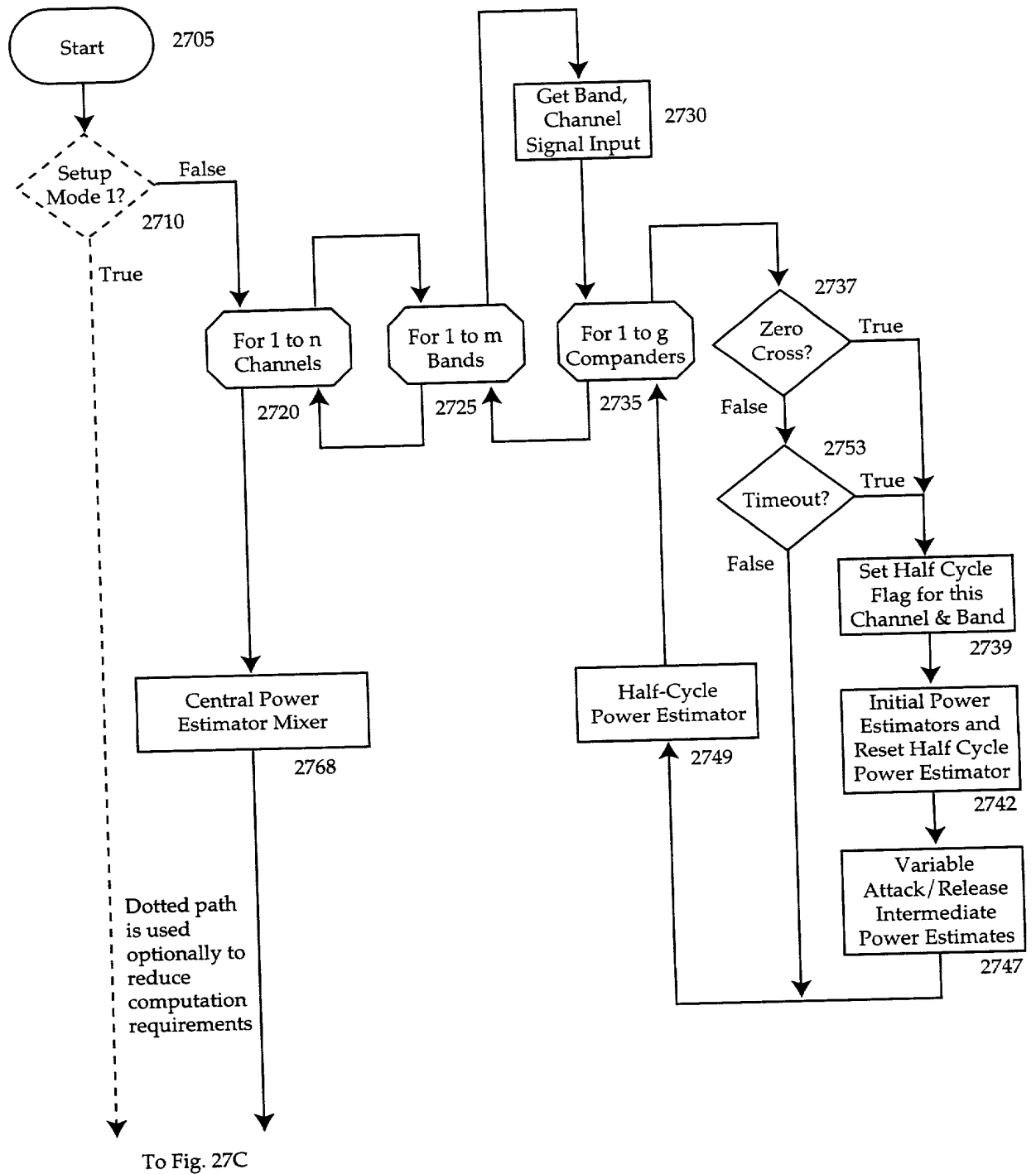


FIG. 27B

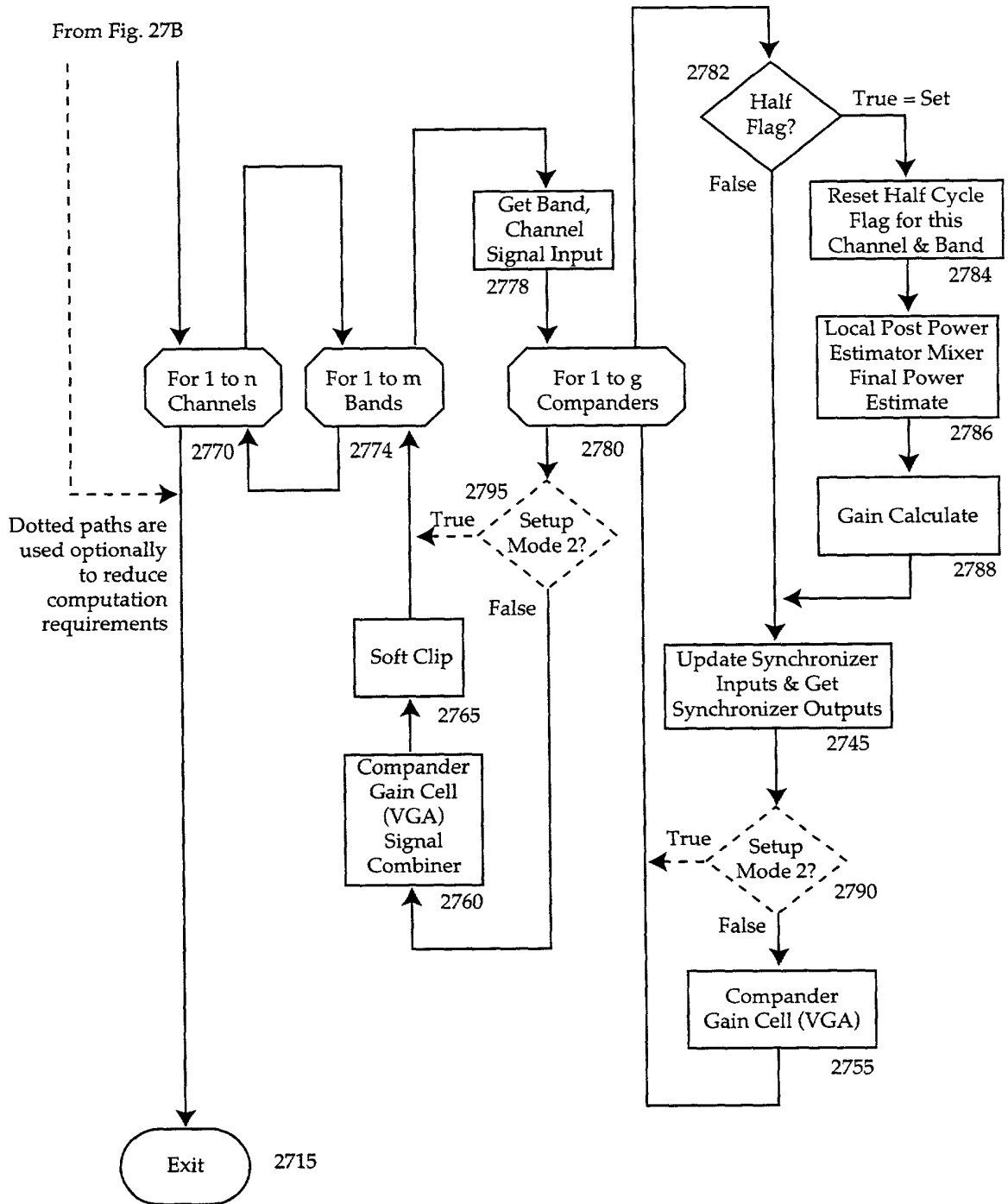


FIG. 27C

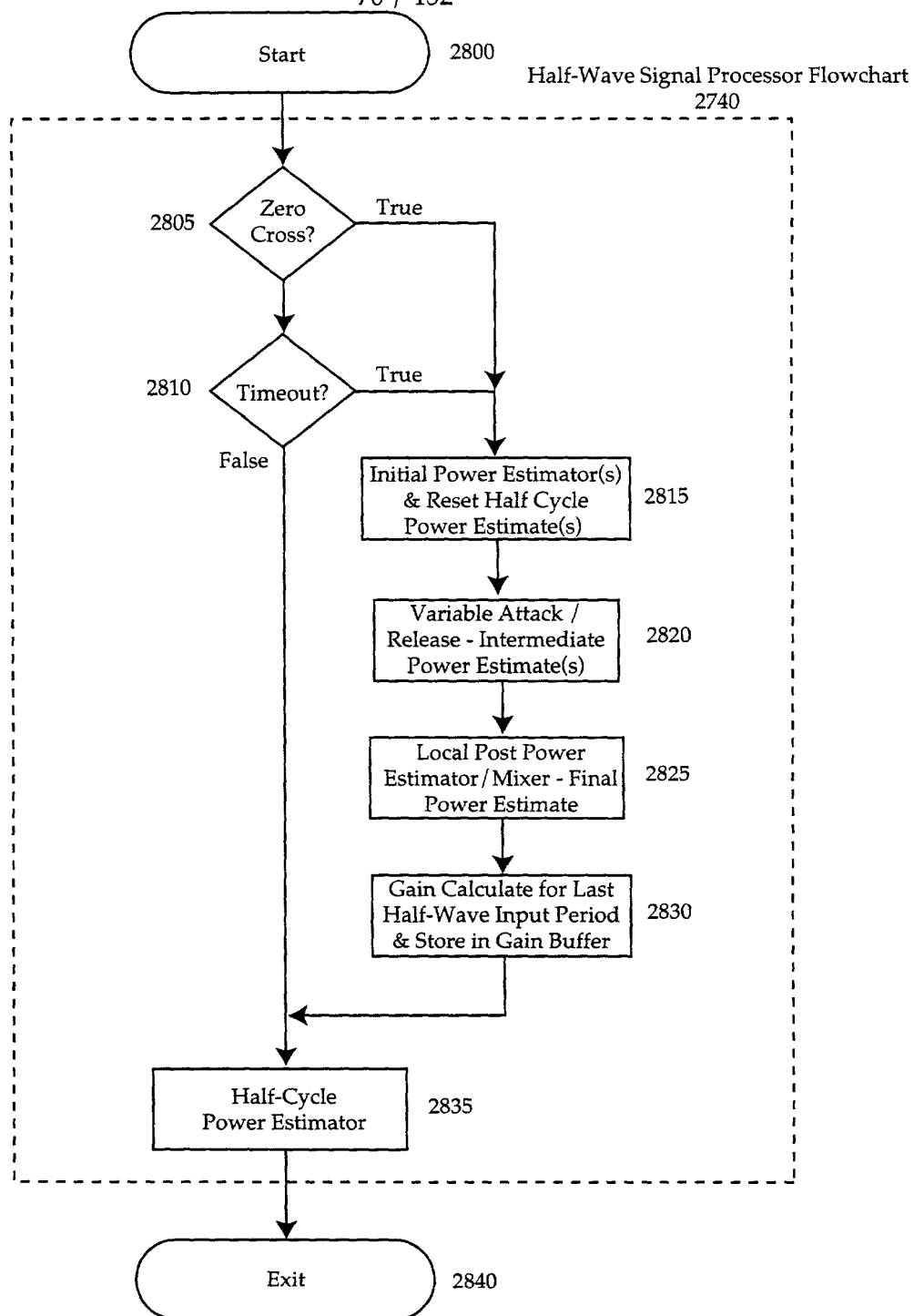


FIG. 28

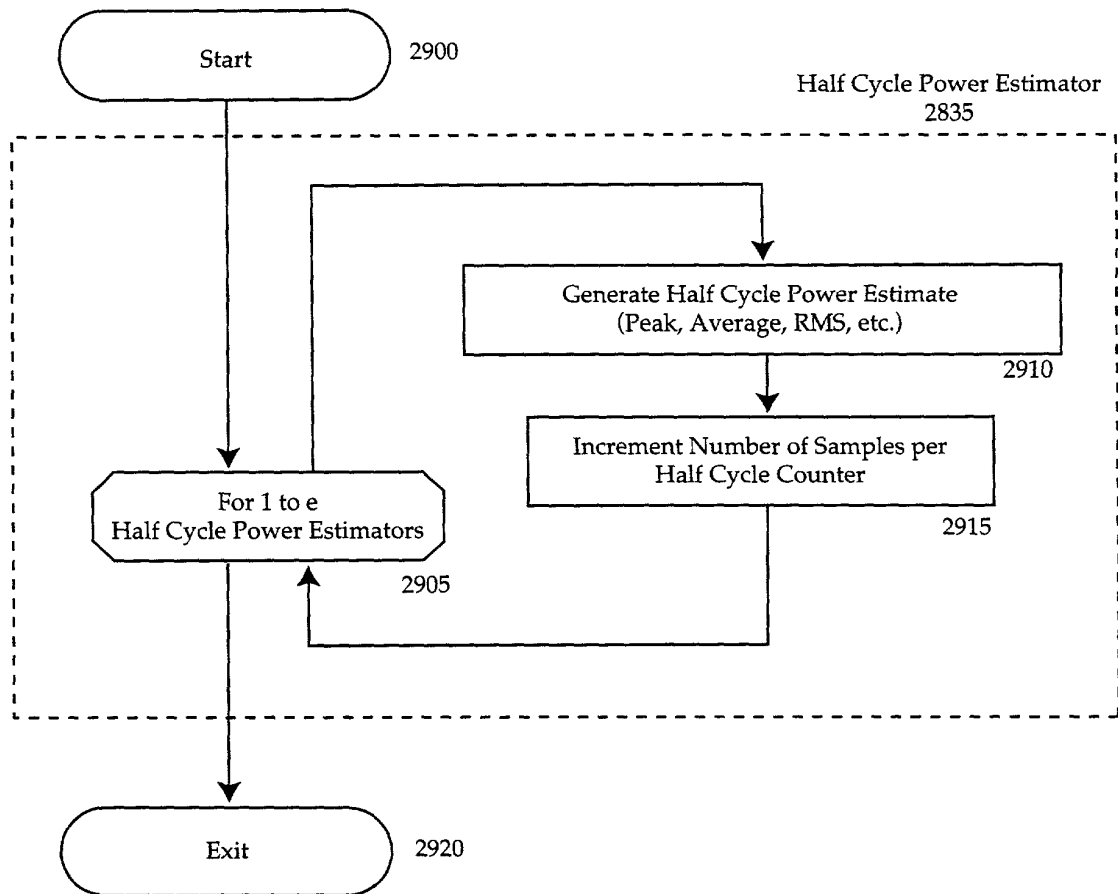


FIG. 29

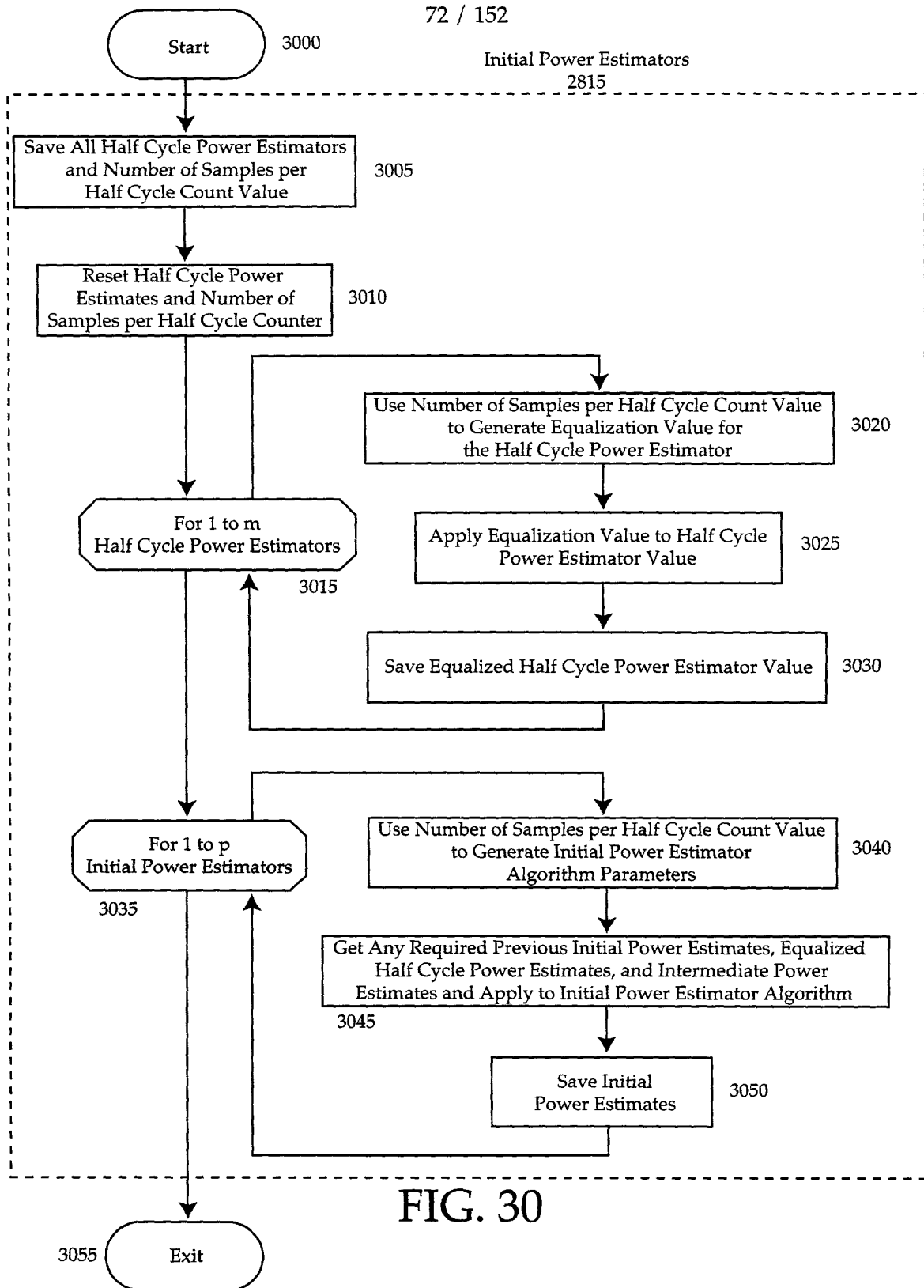
Initial Power Estimators
2815

FIG. 30

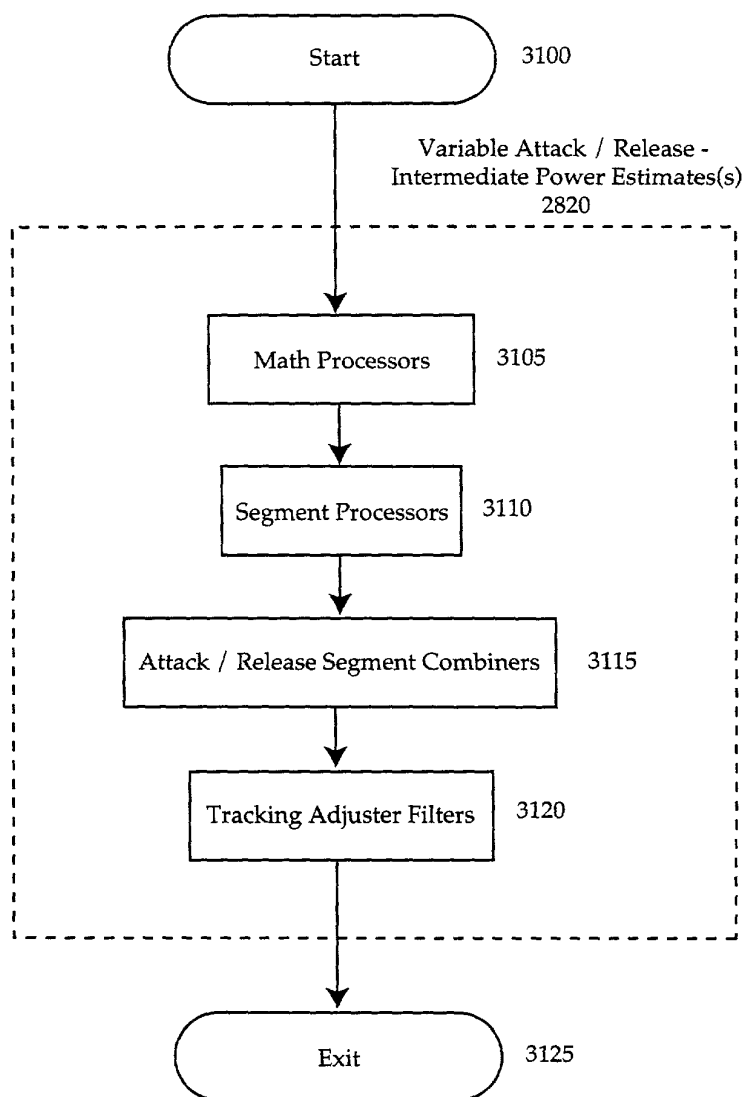


FIG. 31

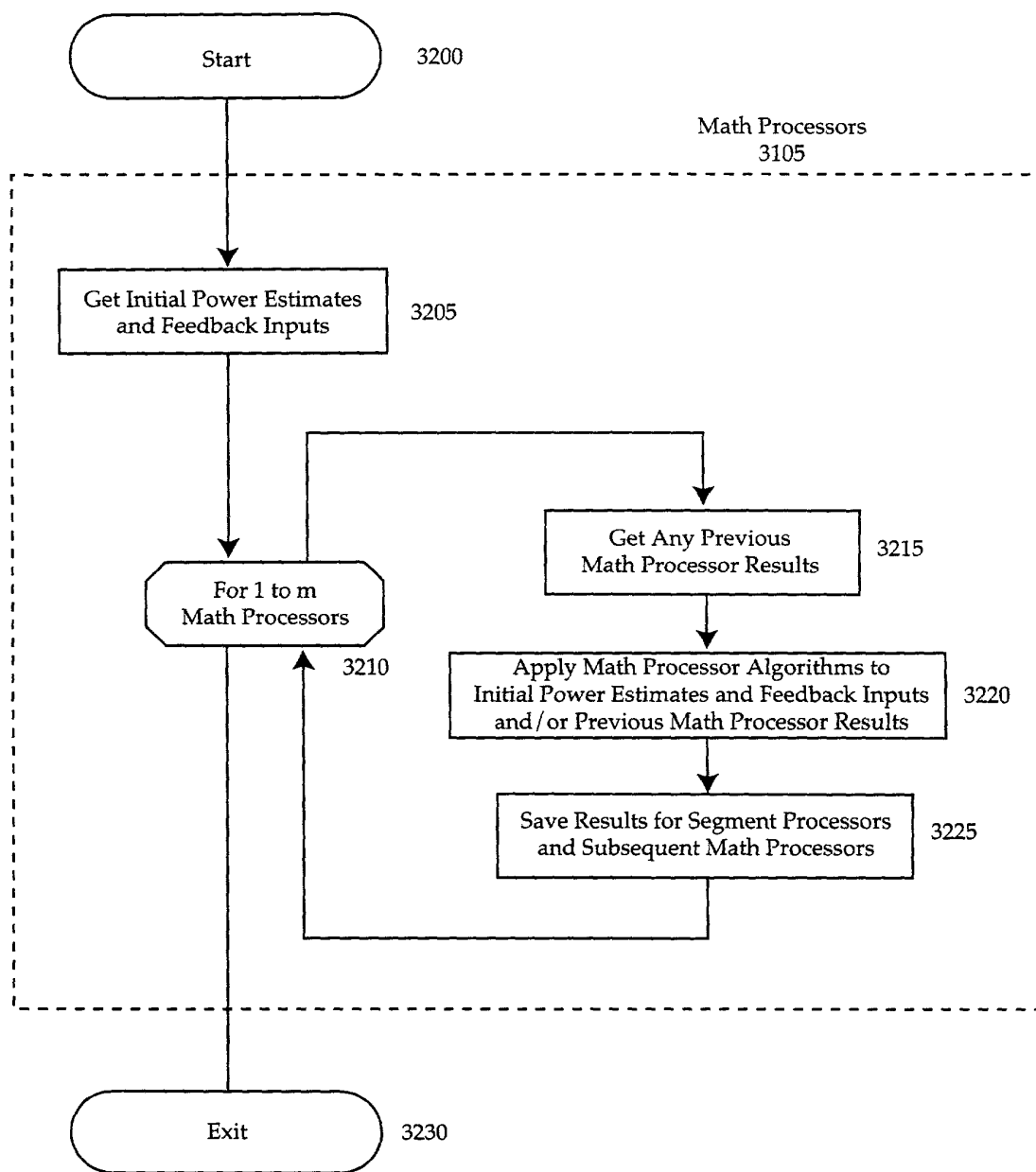


FIG. 32

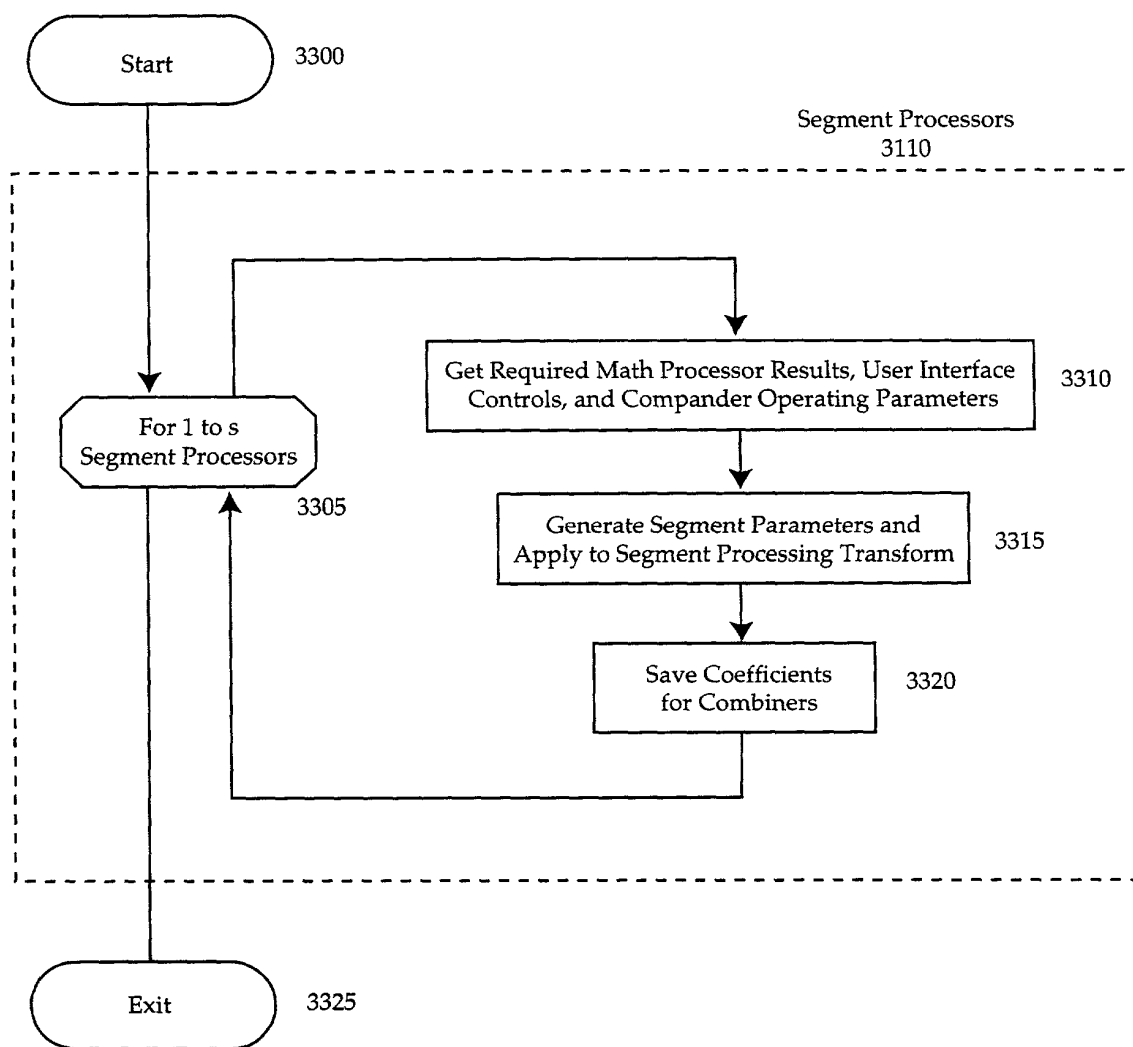


FIG. 33

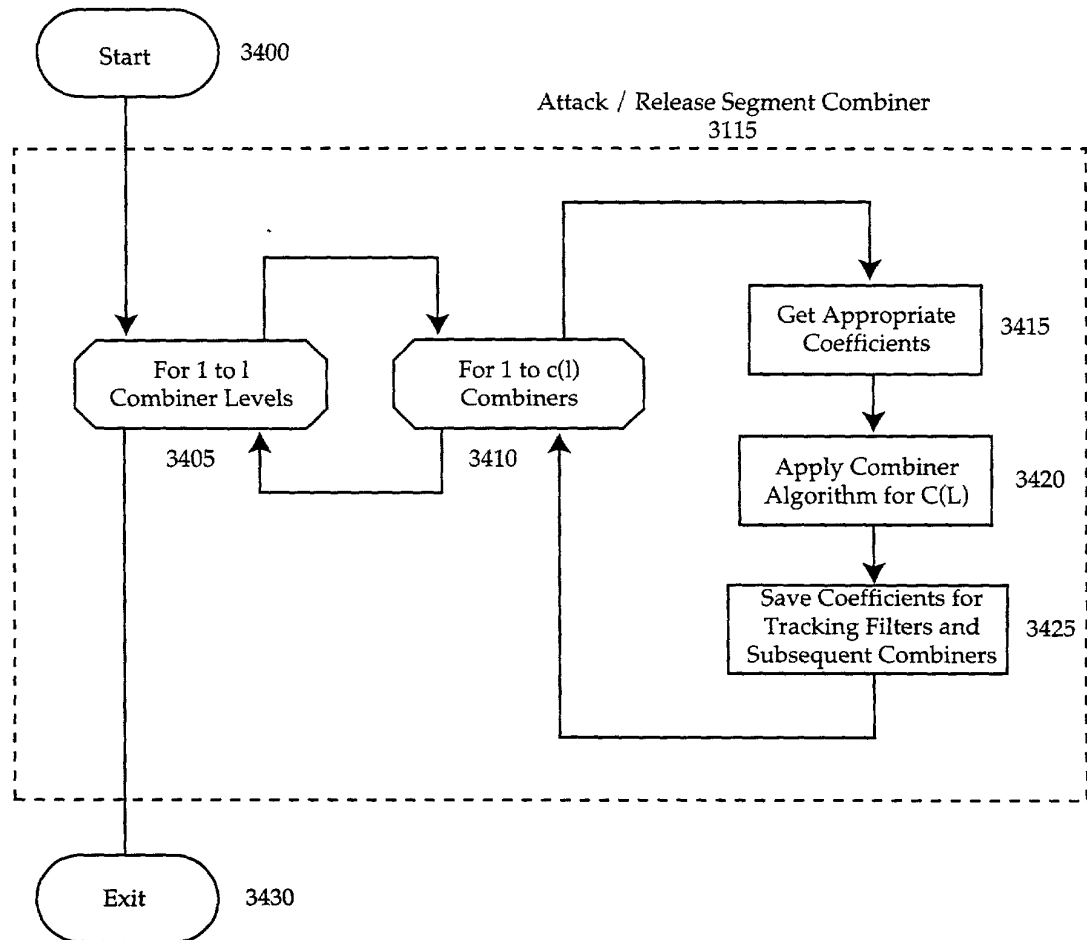


FIG. 34

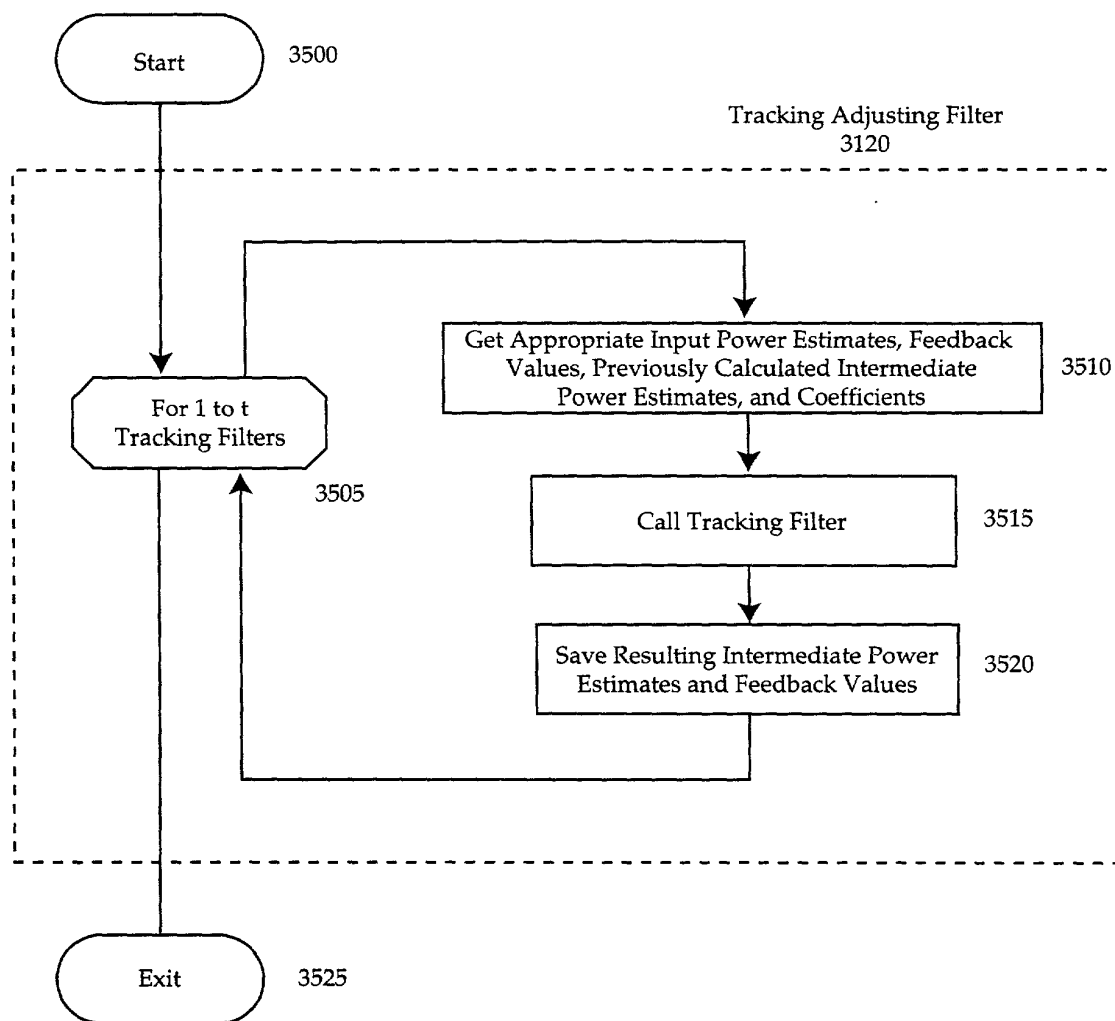


FIG. 35

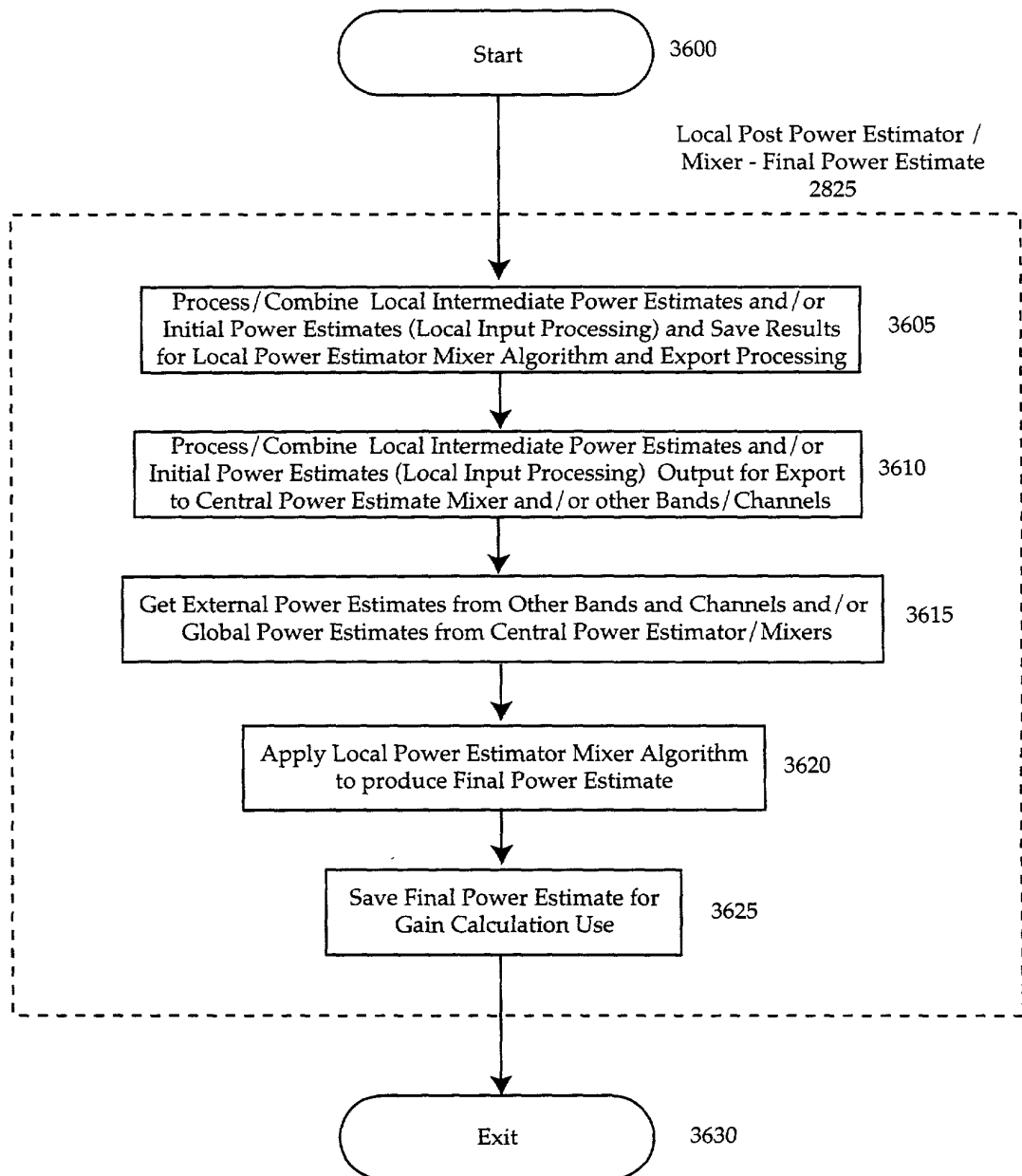


FIG. 36

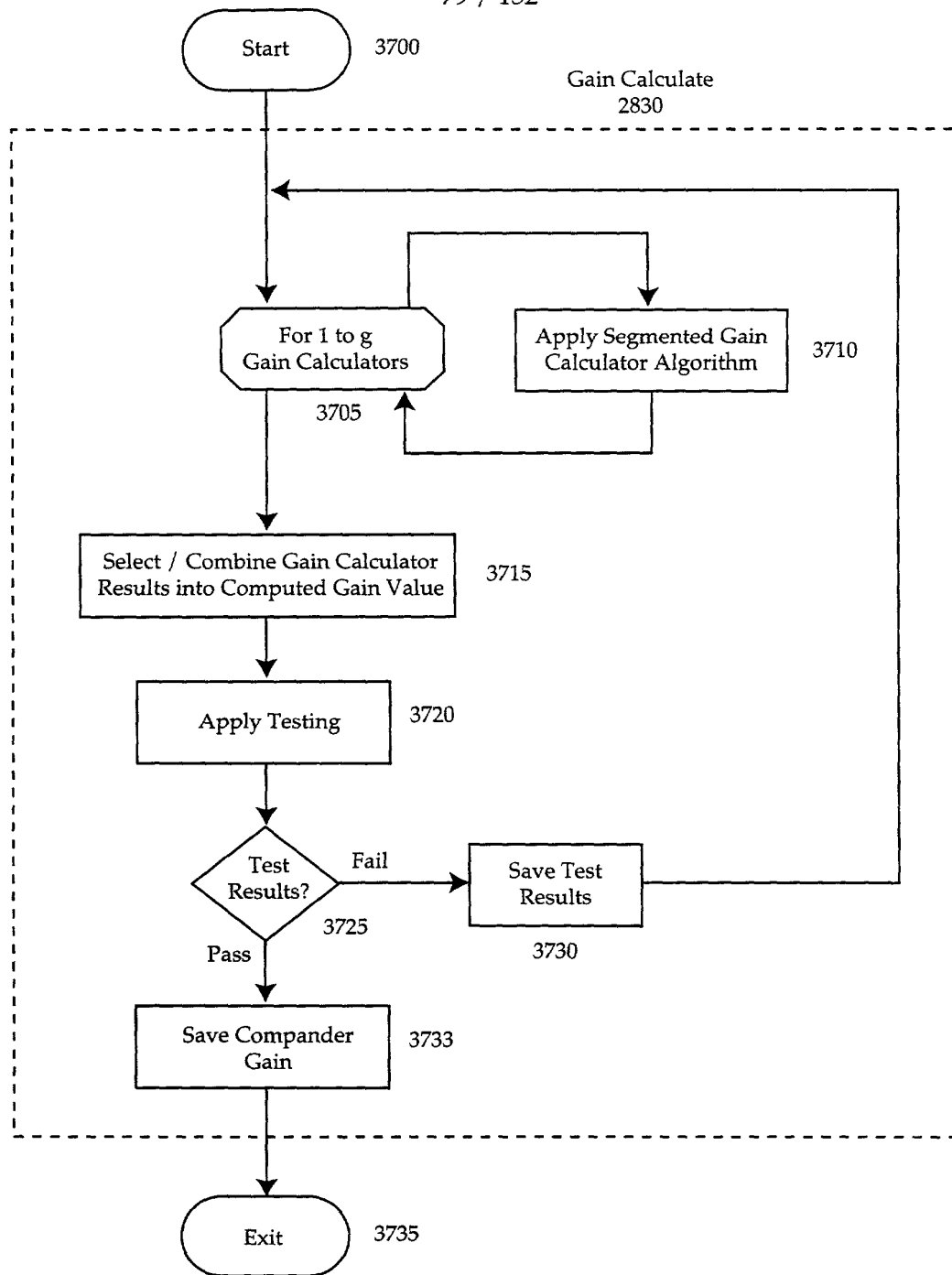


FIG. 37A

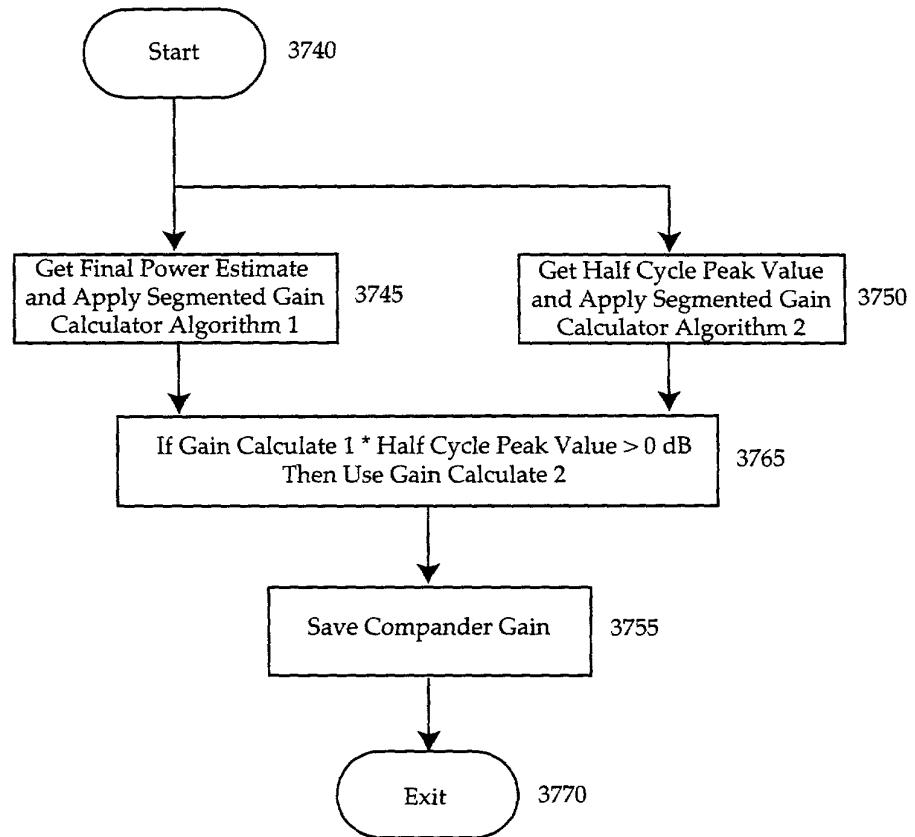


FIG. 37B

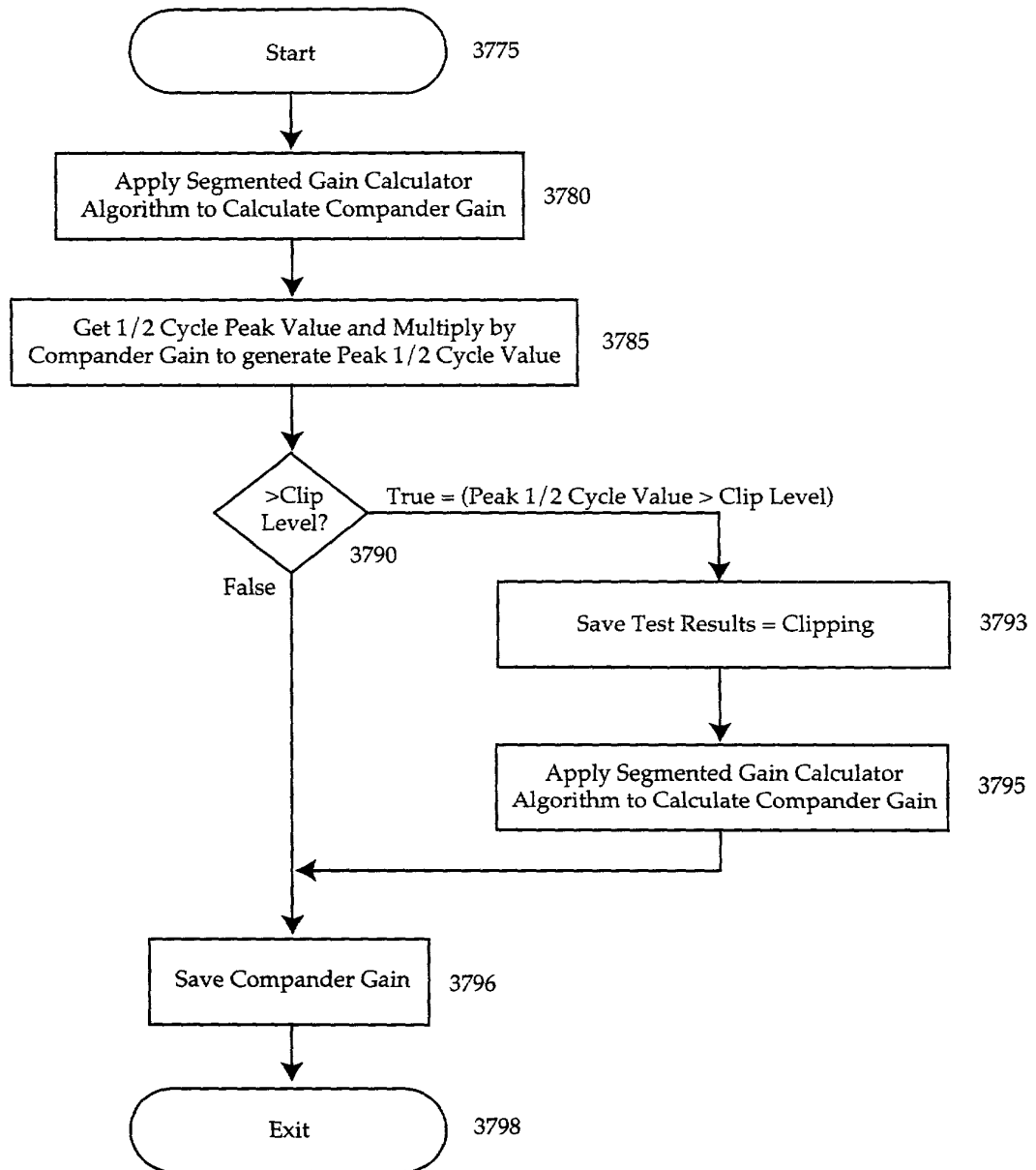


FIG. 37C

3800

Start

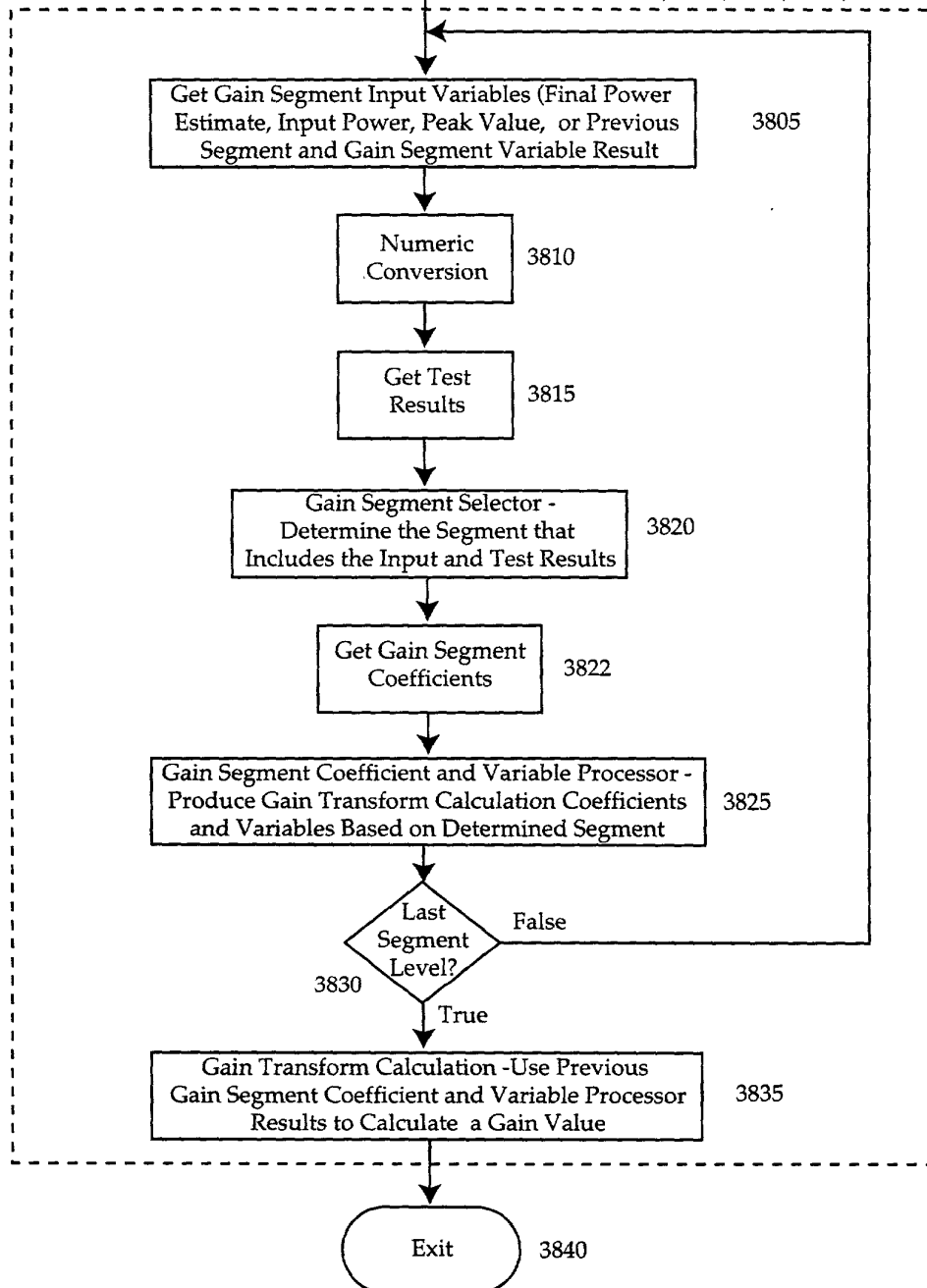
Segmented Gain Calculate Algorithm
3710, 3755, 3760, 3780, 3795

FIG. 38

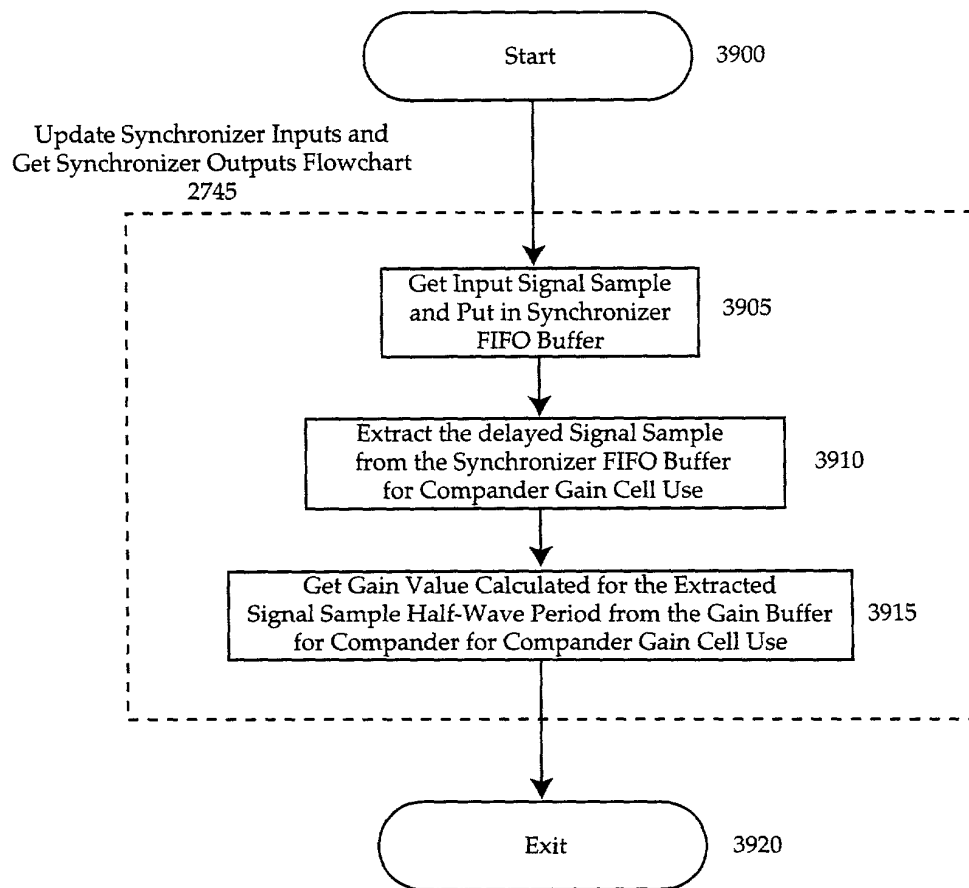


FIG. 39

Softclip 2765

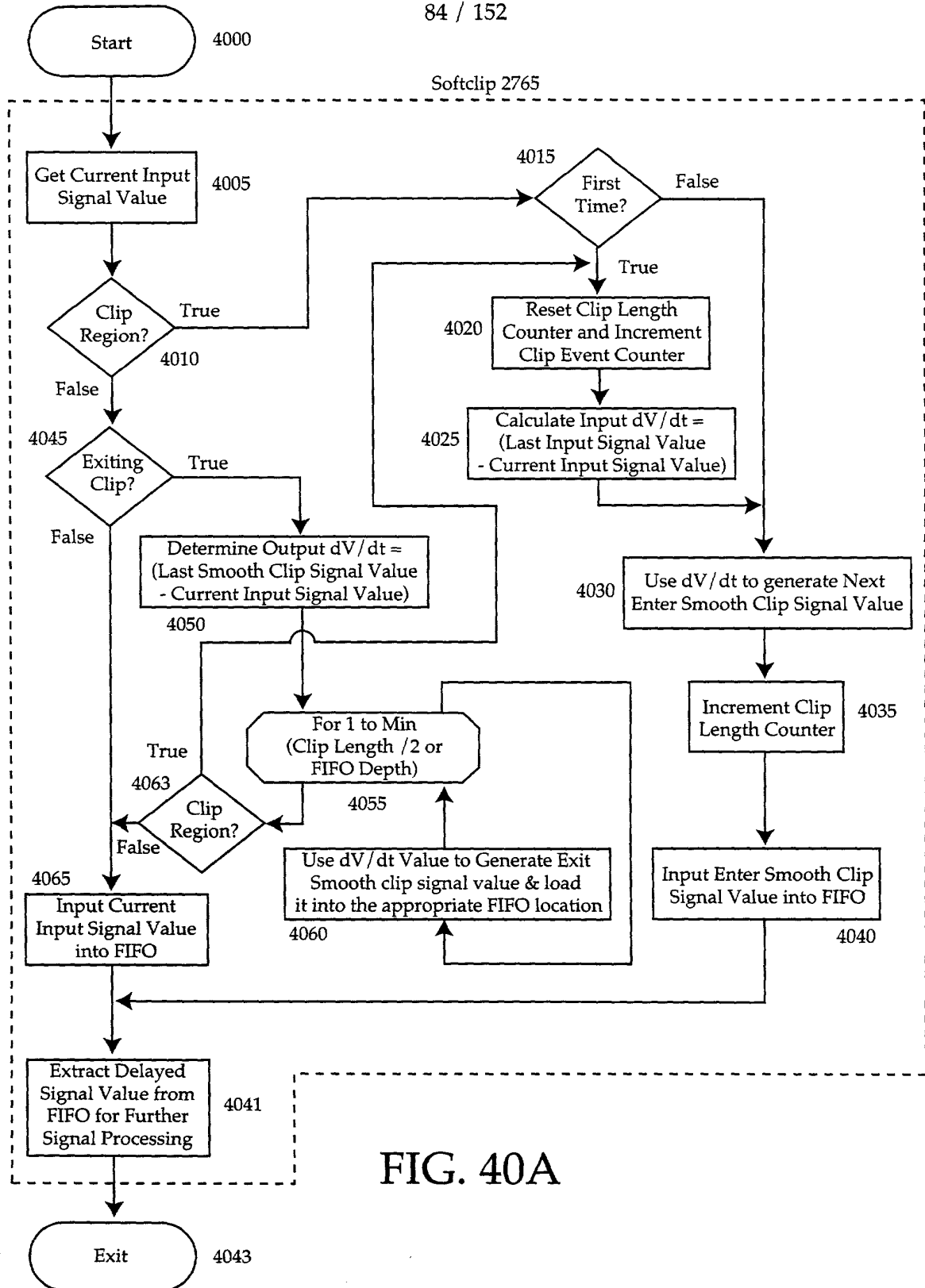


FIG. 40A

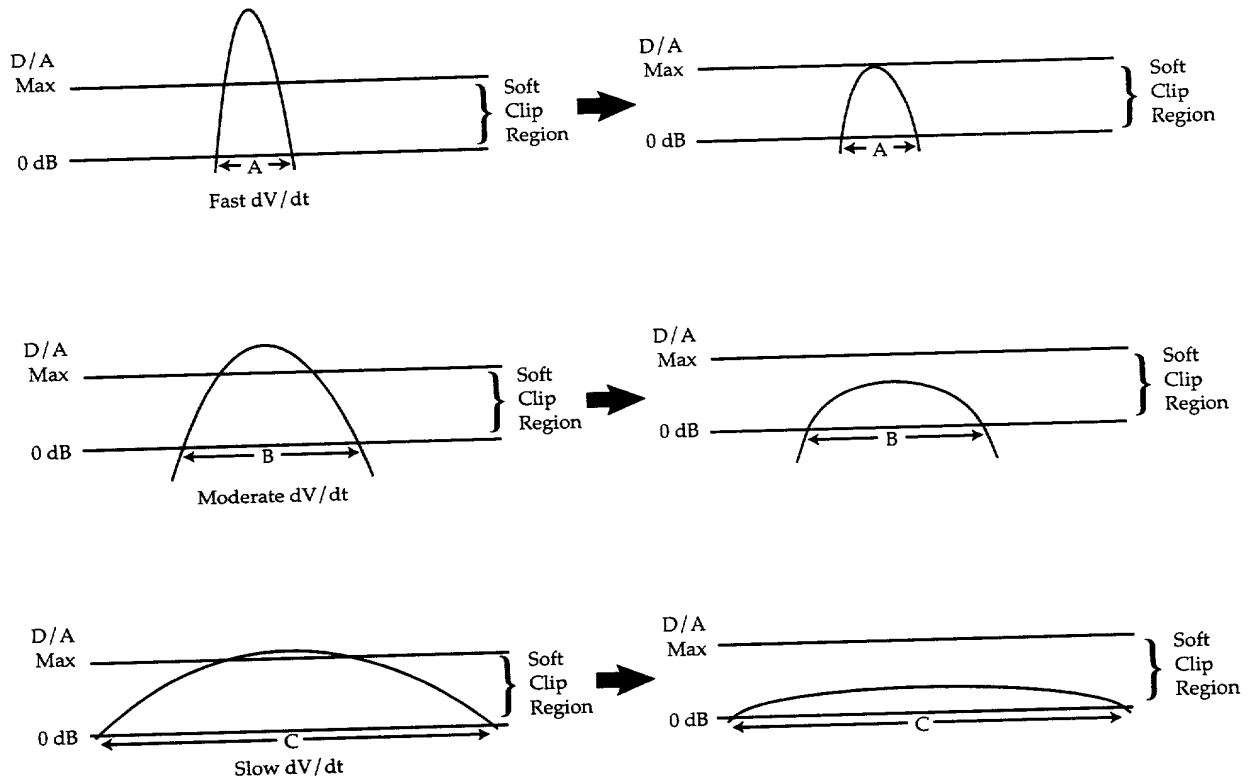


FIG. 40B

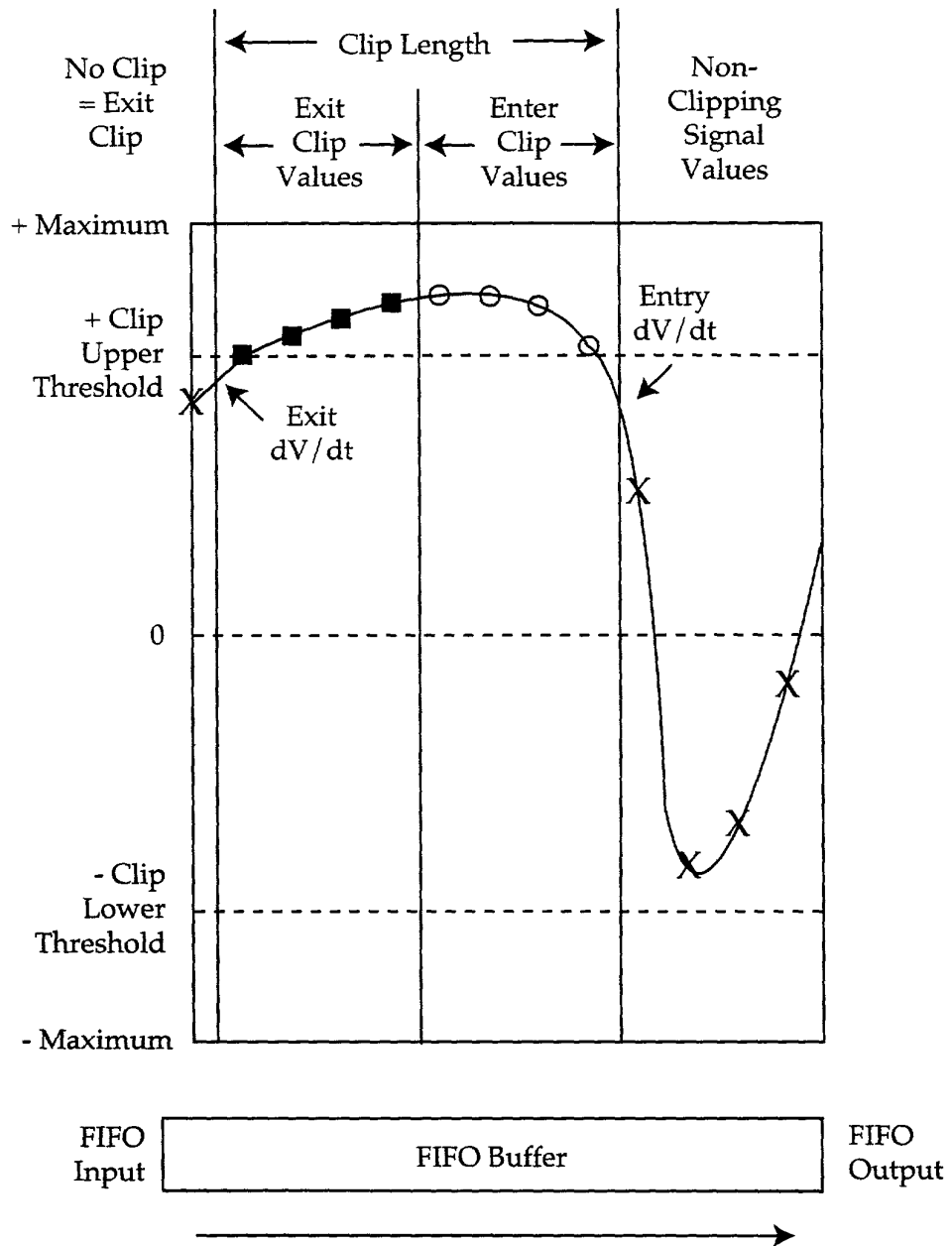


FIG. 40C

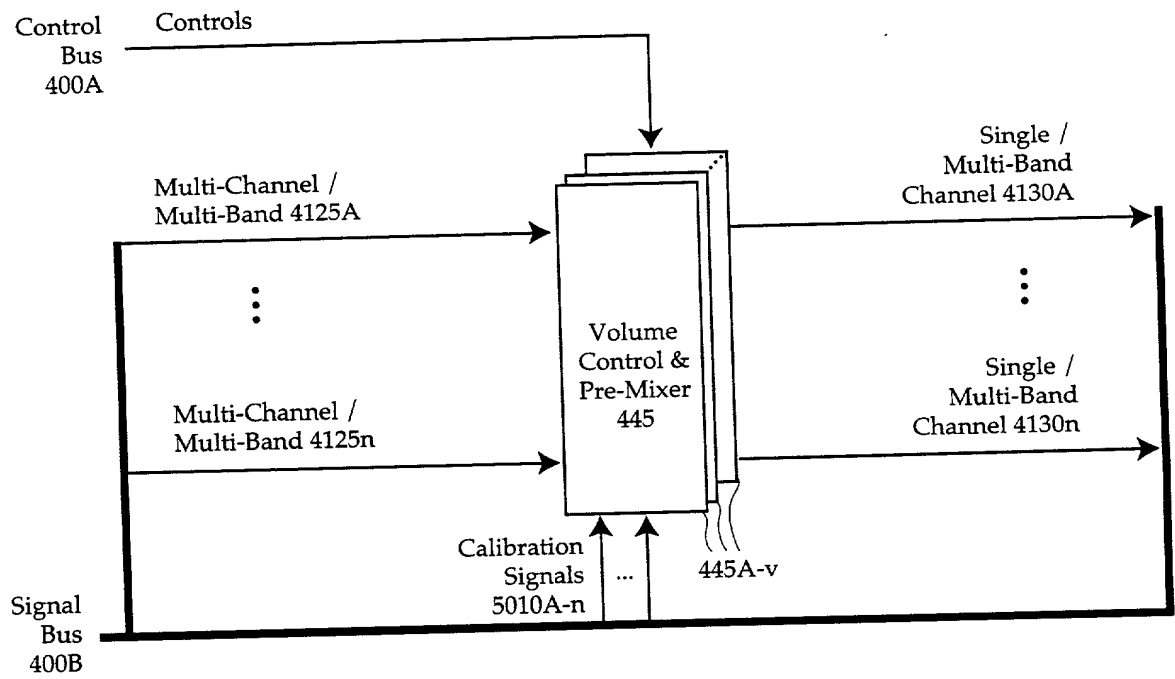


FIG. 41A

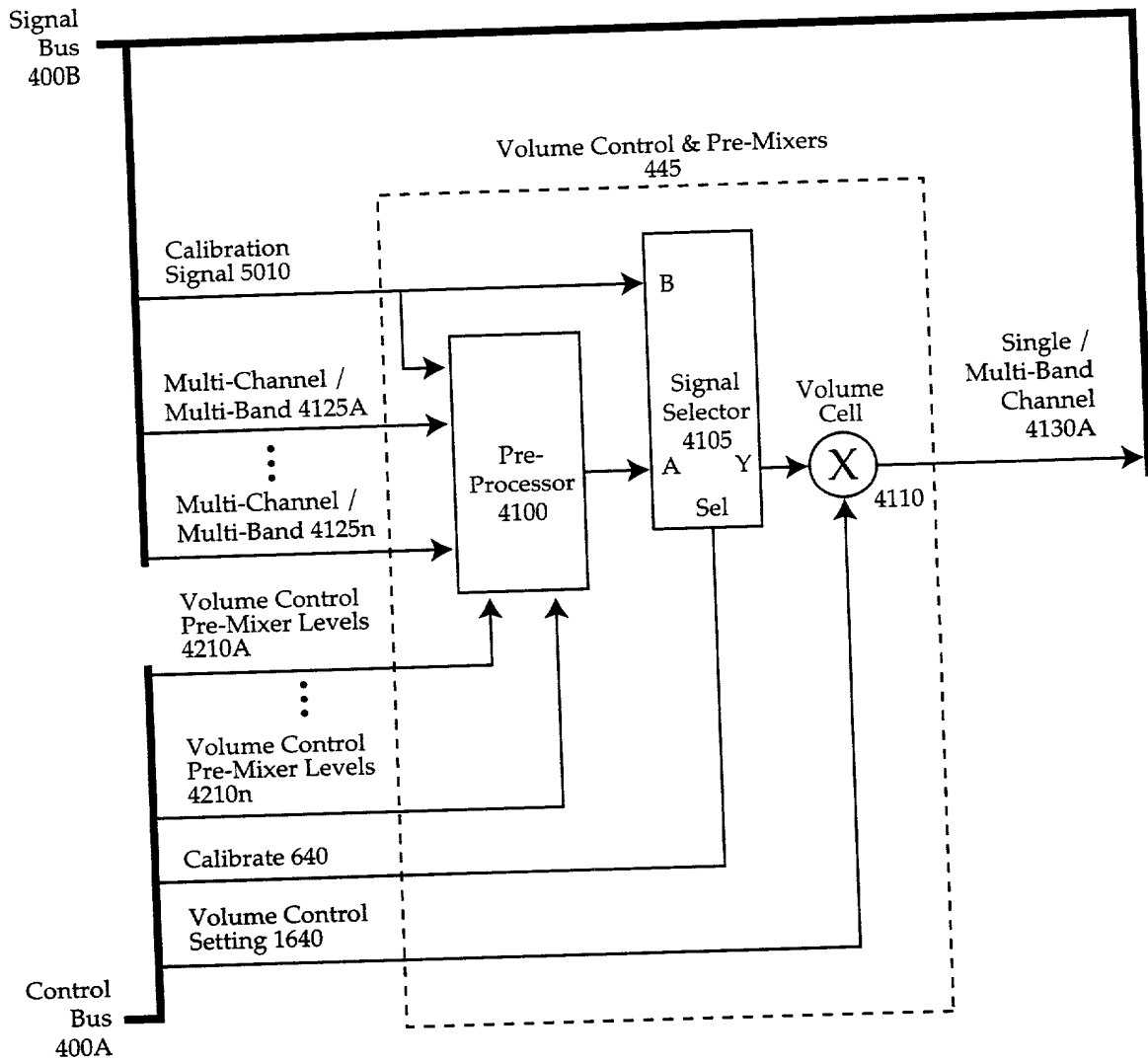


FIG. 41B

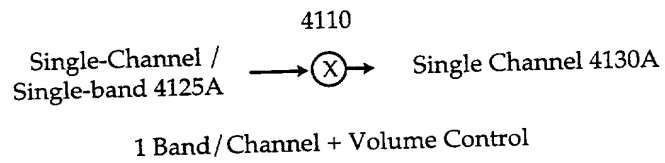


FIG. 42A

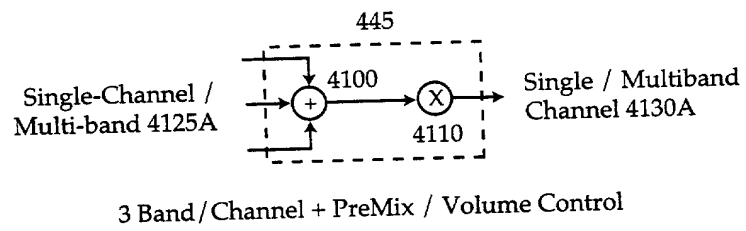
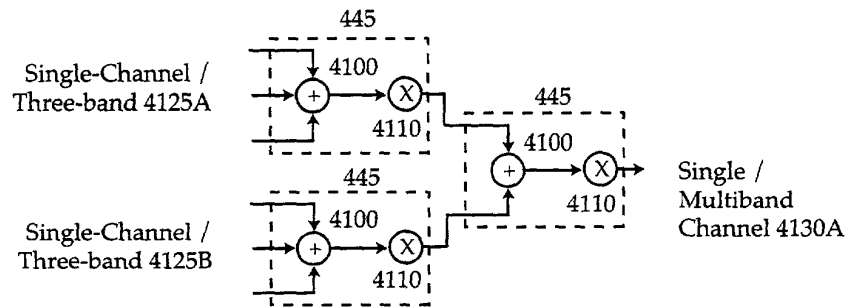
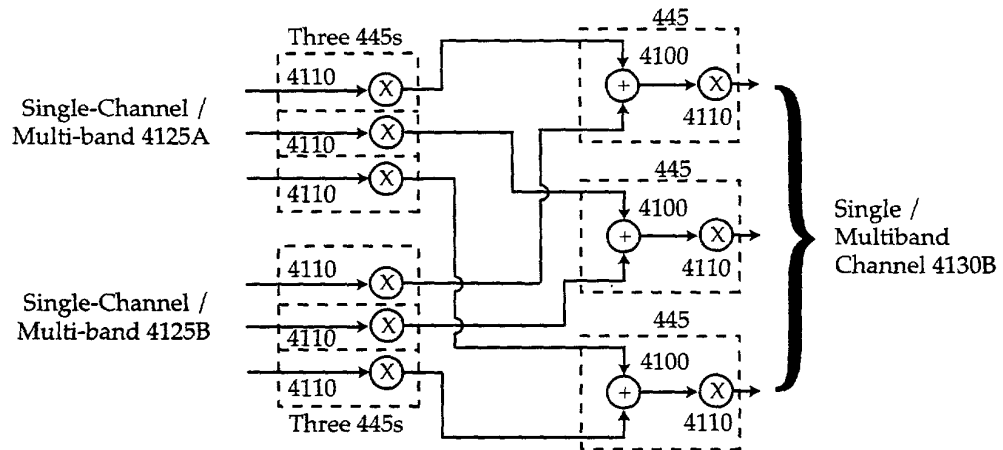


FIG. 42B



3 Band/Channel + Pre-Mix / Volume Control > Premix Volume Control
 3 Band/Channel + Pre-Mix / Volume Control

FIG. 42C



3 Band/Channel + 3 Volume Control > 3 Premix Volume Control
 3 Band/Channel + 3 Volume Control

FIG. 42D

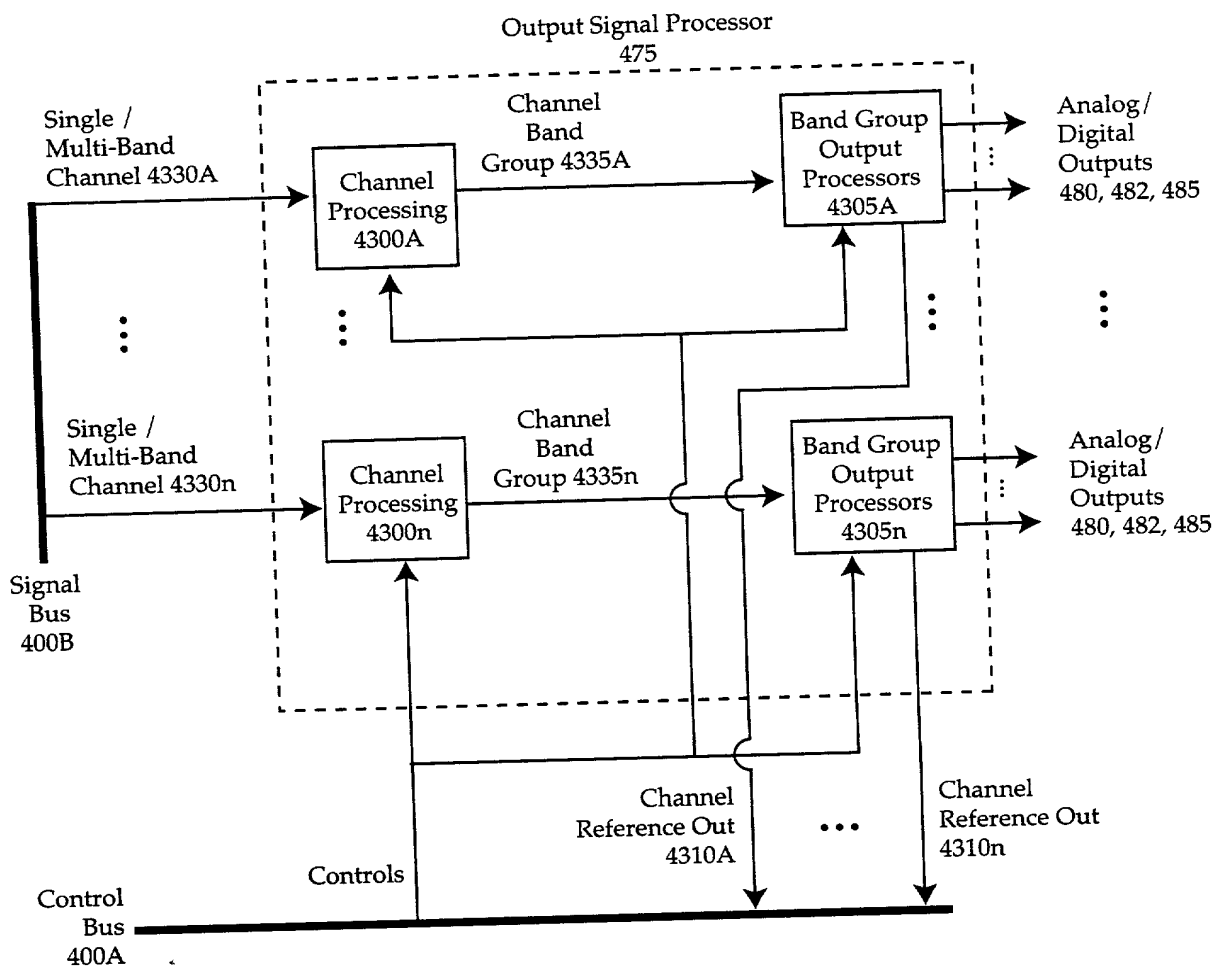


FIG. 43A

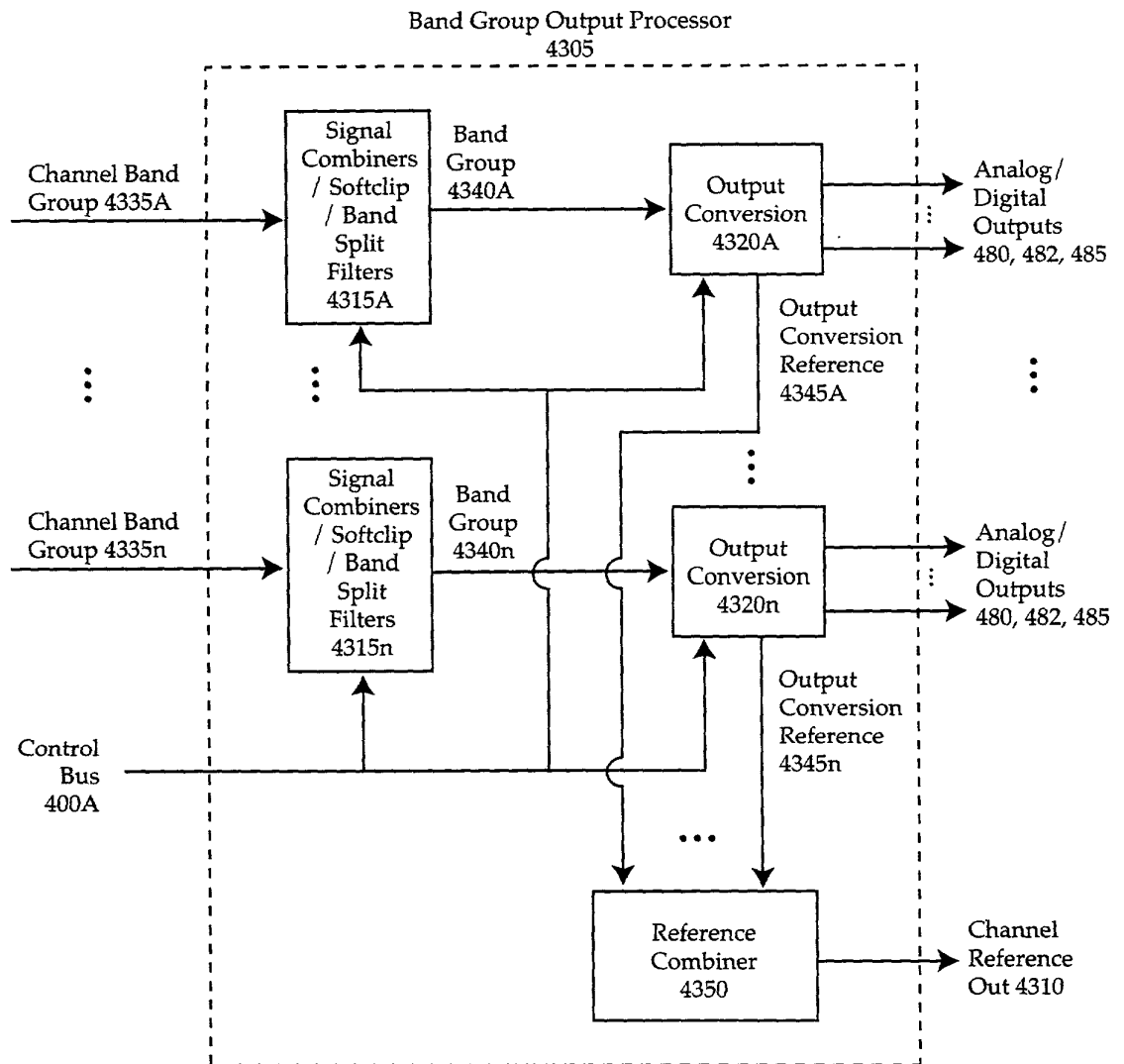


FIG. 43B

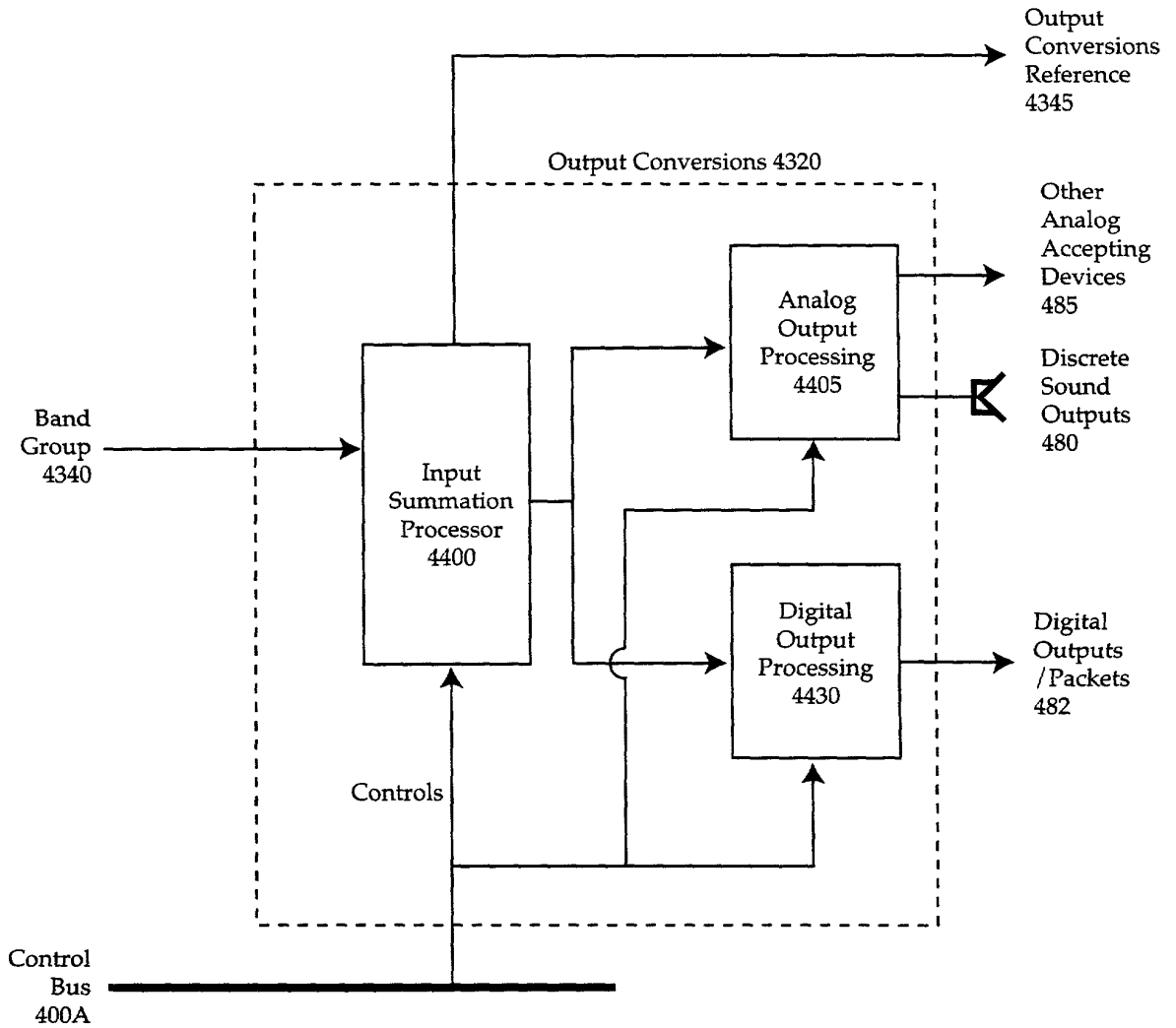


FIG. 44

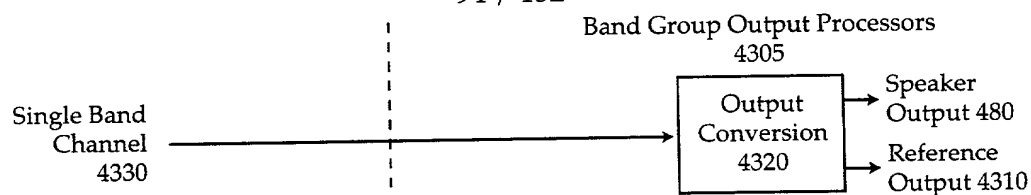


FIG. 45A

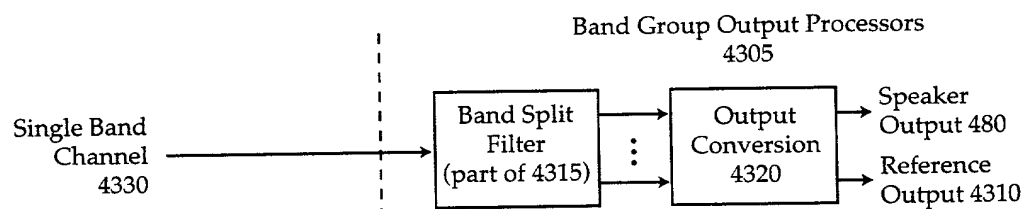


FIG. 45B

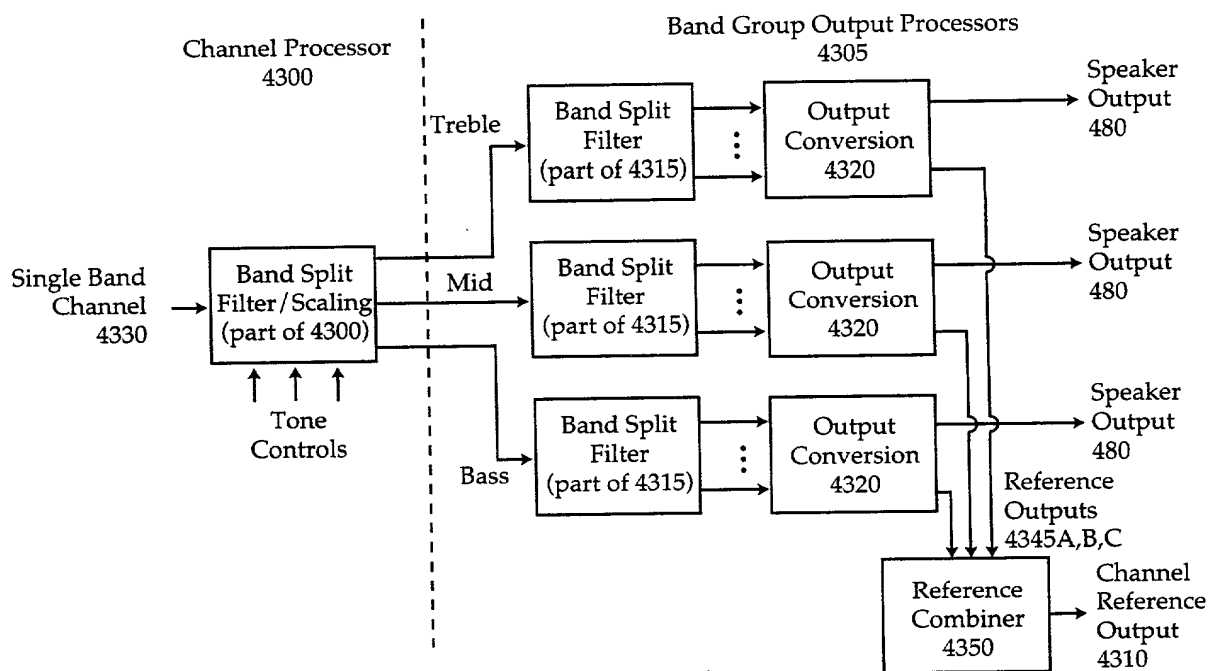


FIG. 45C

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Shapiro-Wilk	Normality
Age	35.5	10.5	20	65	0.5	3.0	0.95	0.95
Gender	1.5	0.5	1	2	0.0	0.0	0.95	0.95
Marital Status	1.5	0.5	1	2	0.0	0.0	0.95	0.95
Education	12.5	1.5	10	15	0.5	3.0	0.95	0.95
Income	3000	1000	1000	6000	0.5	3.0	0.95	0.95
Occupation	1.5	0.5	1	2	0.0	0.0	0.95	0.95
Health Status	1.5	0.5	1	2	0.0	0.0	0.95	0.95
Stress Level	3.5	1.5	1	6	0.5	3.0	0.95	0.95
Life Satisfaction	4.5	1.5	1	7	0.5	3.0	0.95	0.95
Resilience	5.5	1.5	1	8	0.5	3.0	0.95	0.95
Optimism	6.5	1.5	1	9	0.5	3.0	0.95	0.95
Gratitude	7.5	1.5	1	10	0.5	3.0	0.95	0.95
Forgiveness	8.5	1.5	1	11	0.5	3.0	0.95	0.95
Compassion	9.5	1.5	1	12	0.5	3.0	0.95	0.95
Kindness	10.5	1.5	1	13	0.5	3.0	0.95	0.95
Generosity	11.5	1.5	1	14	0.5	3.0	0.95	0.95
Patience	12.5	1.5	1	15	0.5	3.0	0.95	0.95
Humility	13.5	1.5	1	16	0.5	3.0	0.95	0.95
Modesty	14.5	1.5	1	17	0.5	3.0	0.95	0.95
Self-control	15.5	1.5	1	18	0.5	3.0	0.95	0.95
Discipline	16.5	1.5	1	19	0.5	3.0	0.95	0.95
Perseverance	17.5	1.5	1	20	0.5	3.0	0.95	0.95
Determination	18.5	1.5	1	21	0.5	3.0	0.95	0.95
Resolve	19.5	1.5	1	22	0.5	3.0	0.95	0.95
Willpower	20.5	1.5	1	23	0.5	3.0	0.95	0.95
Endurance	21.5	1.5	1	24	0.5	3.0	0.95	0.95
Stamina	22.5	1.5	1	25	0.5	3.0	0.95	0.95
Strength	23.5	1.5	1	26	0.5	3.0	0.95	0.95
Power	24.5	1.5	1	27	0.5	3.0	0.95	0.95
Influence	25.5	1.5	1	28	0.5	3.0	0.95	0.95
Authority	26.5	1.5	1	29	0.5	3.0	0.95	0.95
Leadership	27.5	1.5	1	30	0.5	3.0	0.95	0.95
Management	28.5	1.5	1	31	0.5	3.0	0.95	0.95
Organization	29.5	1.5	1	32	0.5	3.0	0.95	0.95
Coordination	30.5	1.5	1	33	0.5	3.0	0.95	0.95
Communication	31.5	1.5	1	34	0.5	3.0	0.95	0.95
Interpersonal Skills	32.5	1.5	1	35	0.5	3.0	0.95	0.95
Teamwork	33.5	1.5	1	36	0.5	3.0	0.95	0.95
Collaboration	34.5	1.5	1	37	0.5	3.0	0.95	0.95
Partnership	35.5	1.5	1	38	0.5	3.0	0.95	0.95
Relationship	36.5	1.5	1	39	0.5	3.0	0.95	0.95
Connection	37.5	1.5	1	40	0.5	3.0	0.95	0.95
Network	38.5	1.5	1	41	0.5	3.0	0.95	0.95
Community	39.5	1.5	1	42	0.5	3.0	0.95	0.95
Society	40.5	1.5	1	43	0.5	3.0	0.95	0.95
Culture	41.5	1.5	1	44	0.5	3.0	0.95	0.95
Tradition	42.5							

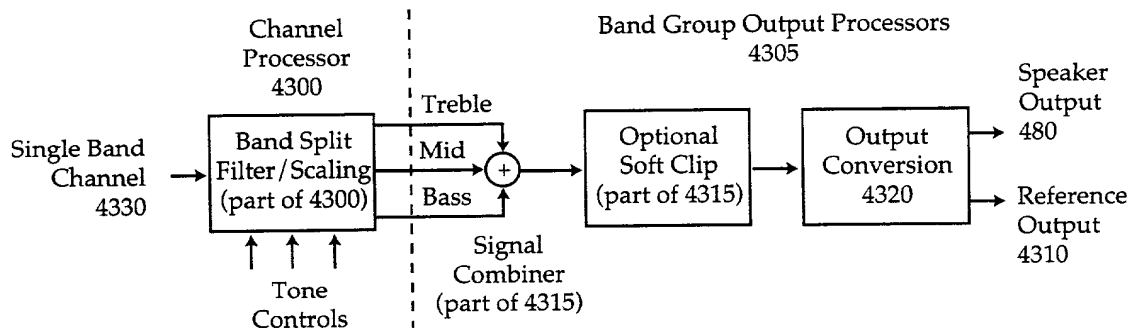


FIG. 45D

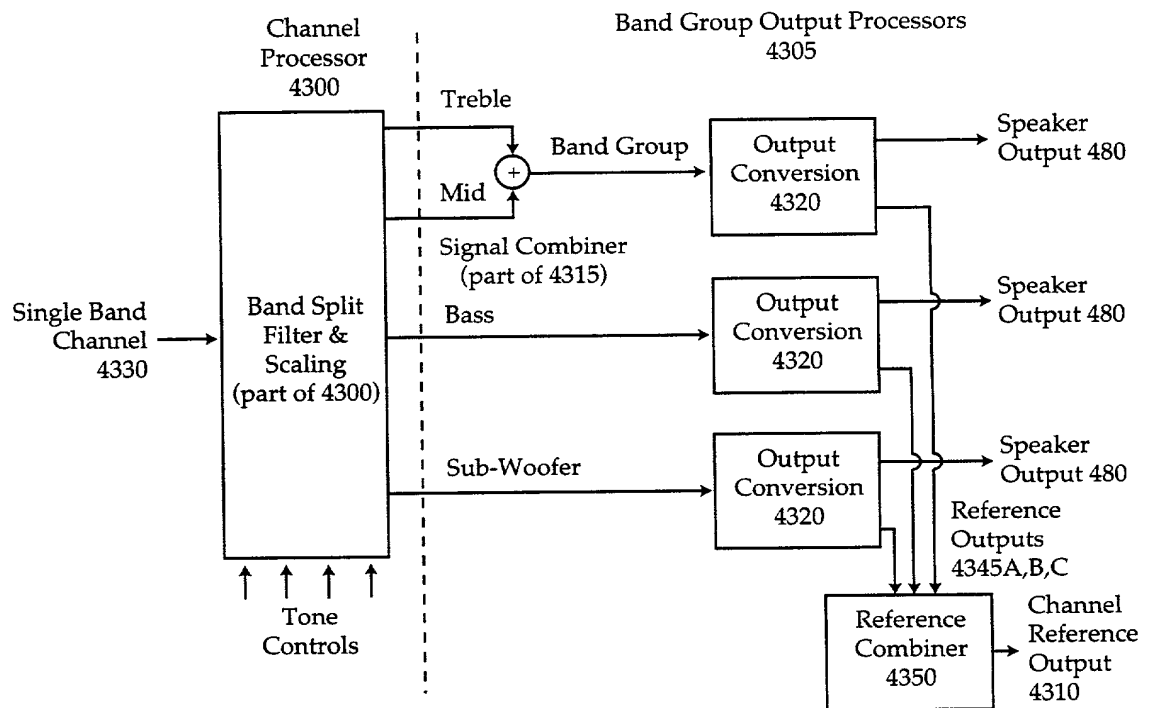


FIG. 45E

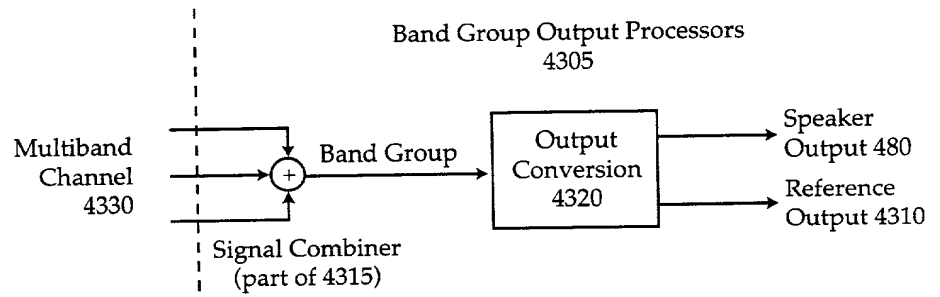


FIG. 45F

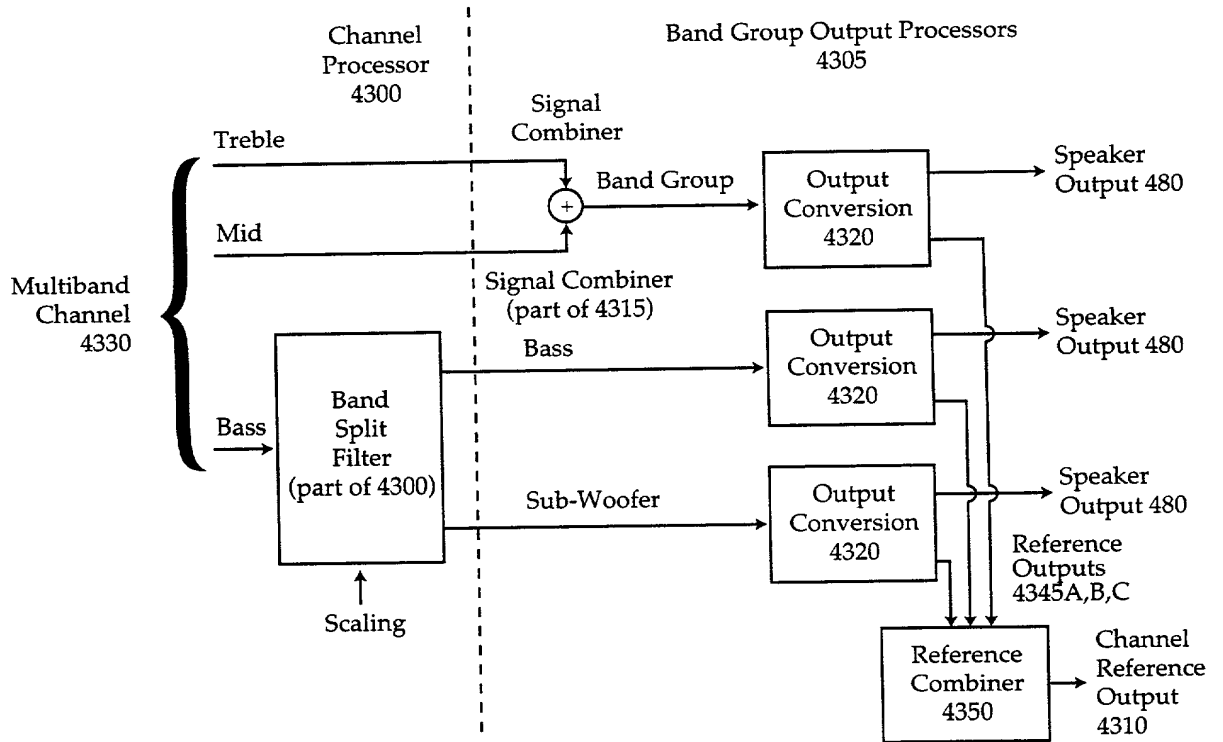


FIG. 45G

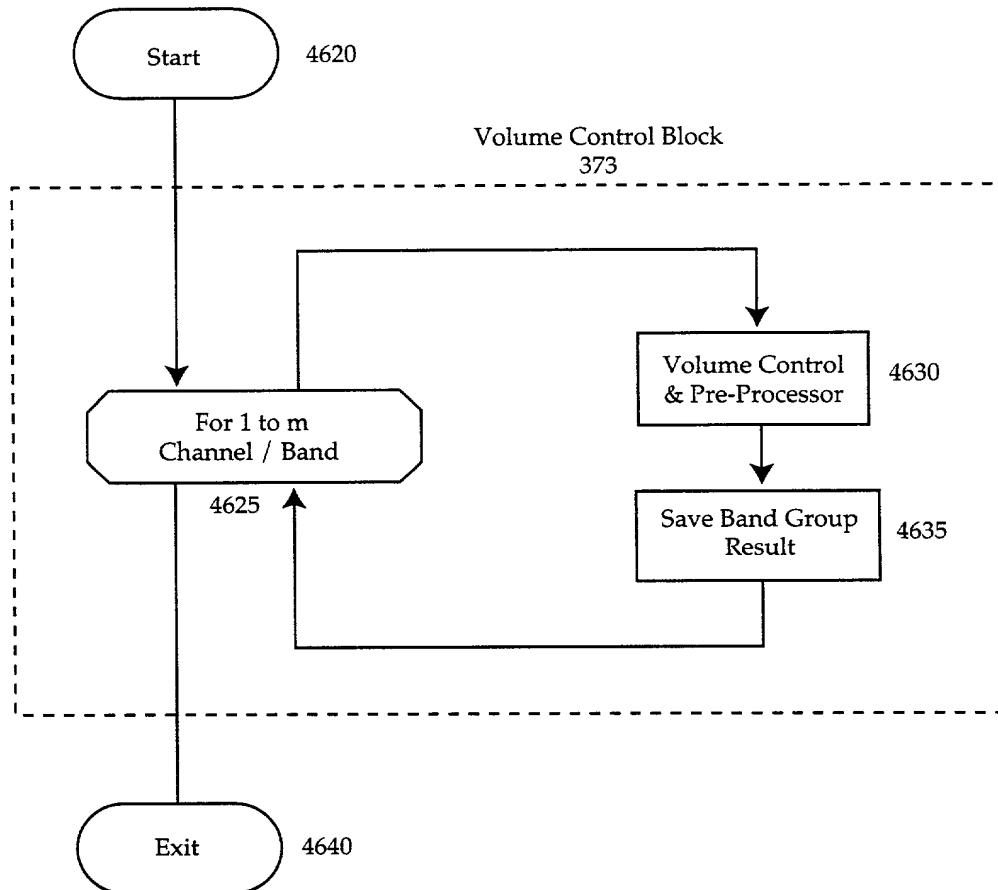


FIG. 46

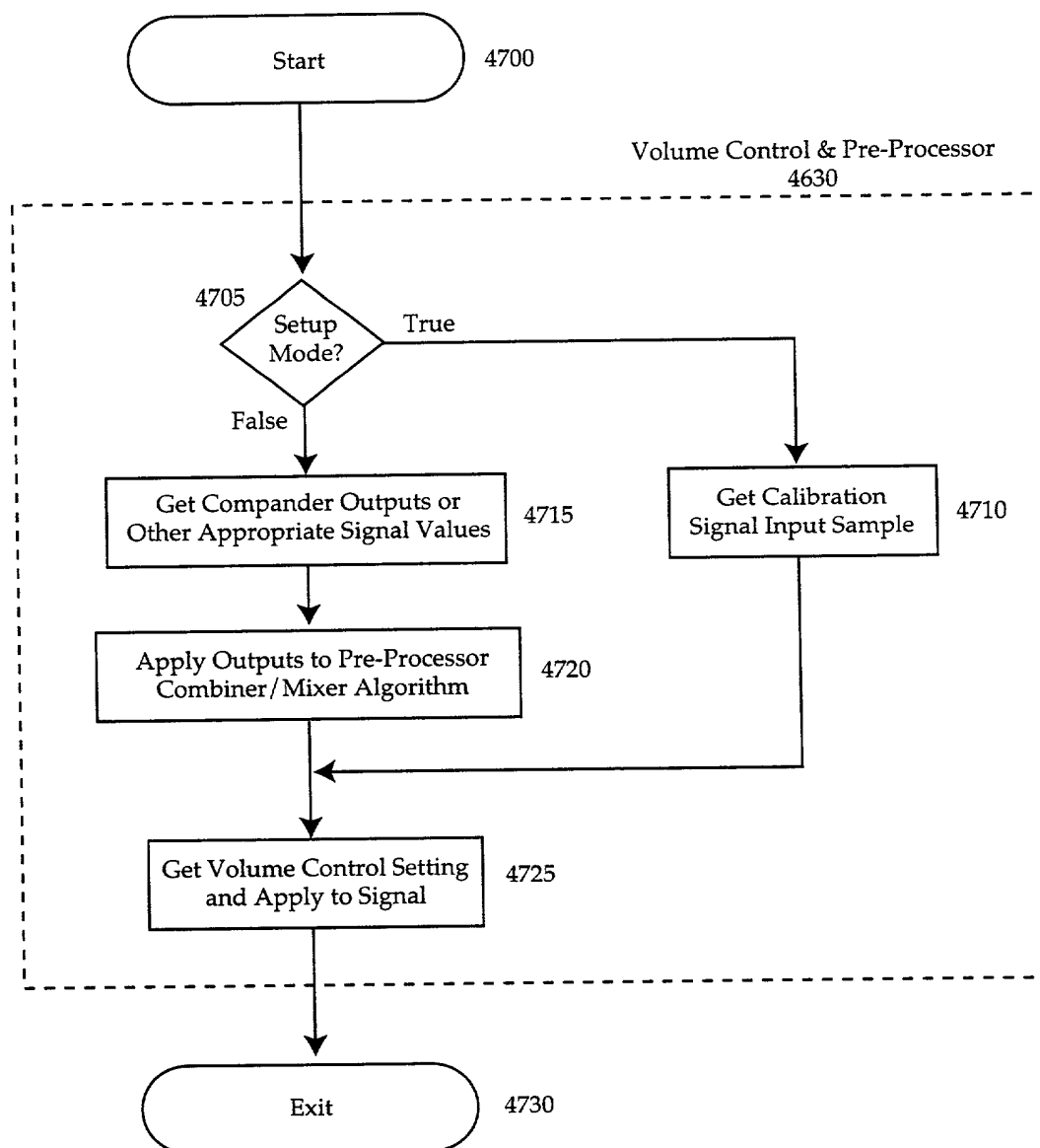


FIG. 47

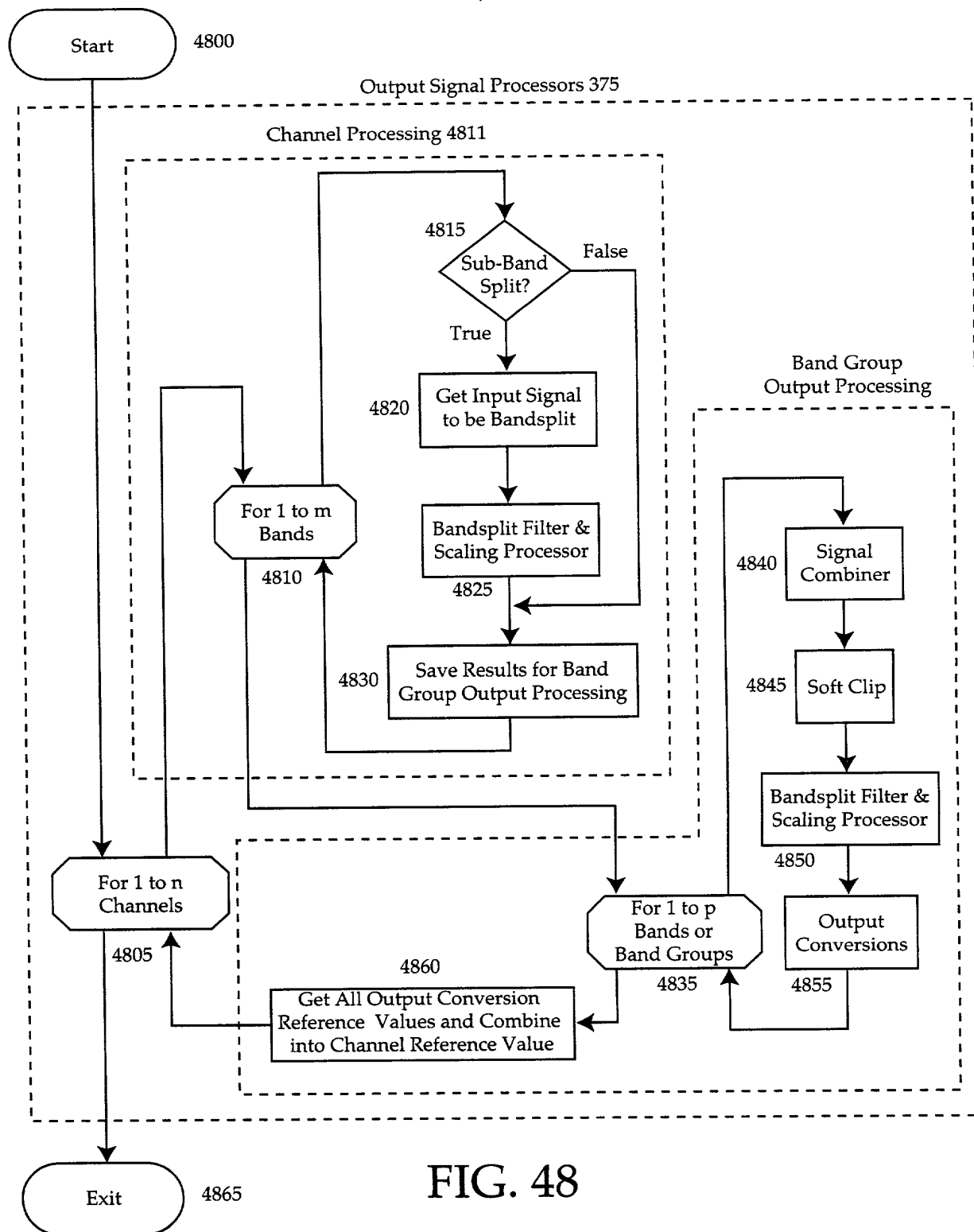


FIG. 48

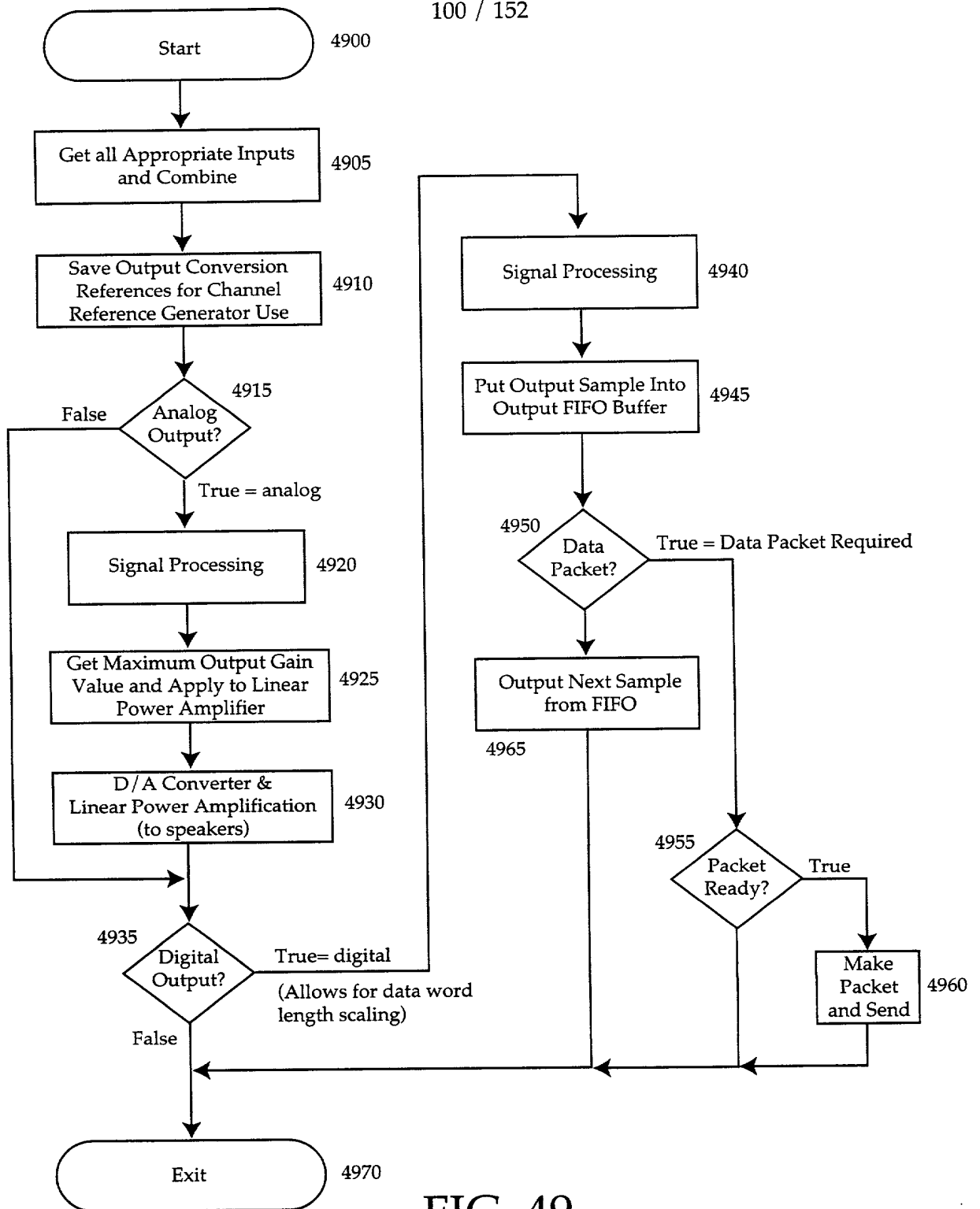


FIG. 49

Calibrator / Annunciator 420

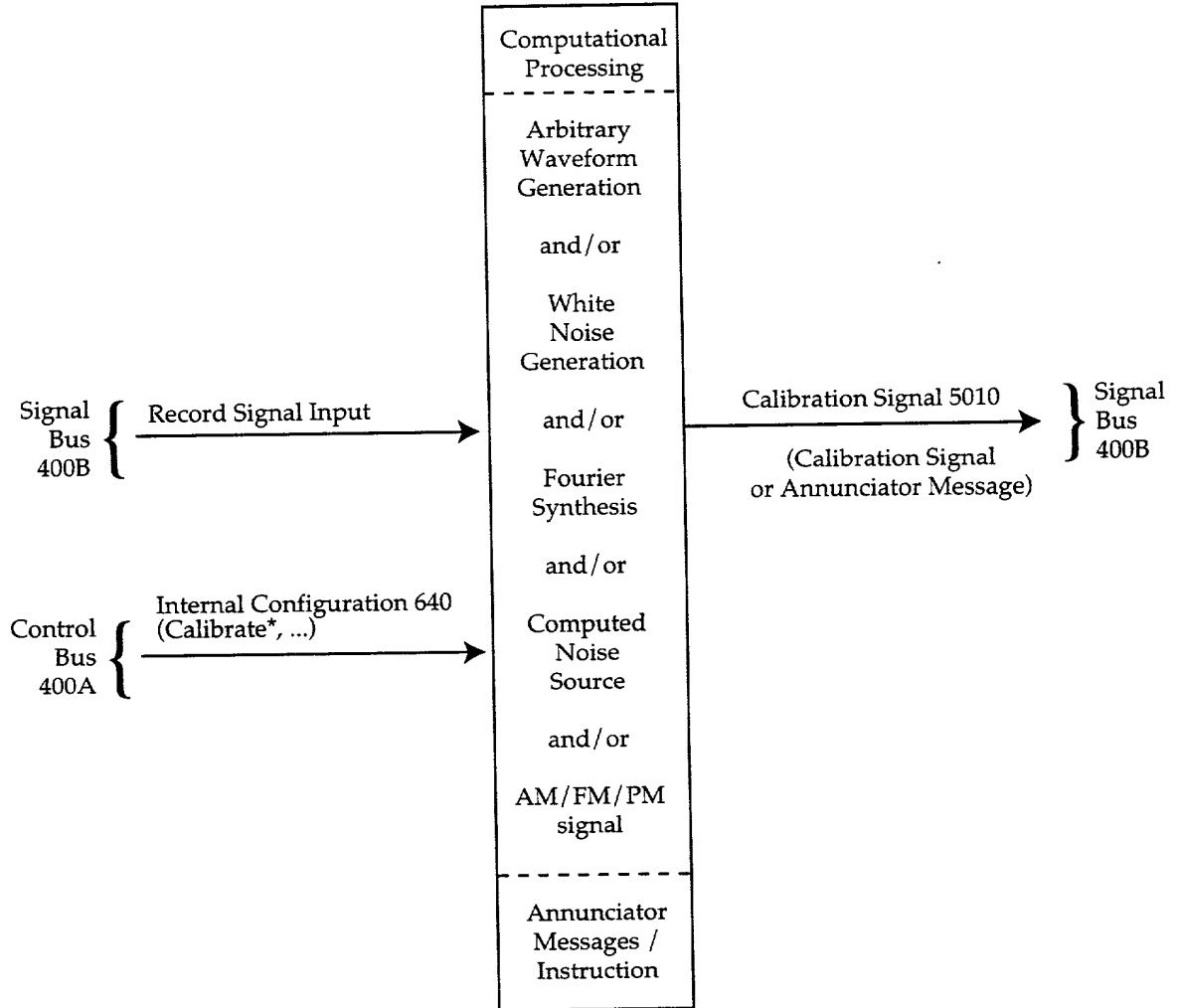


FIG. 50

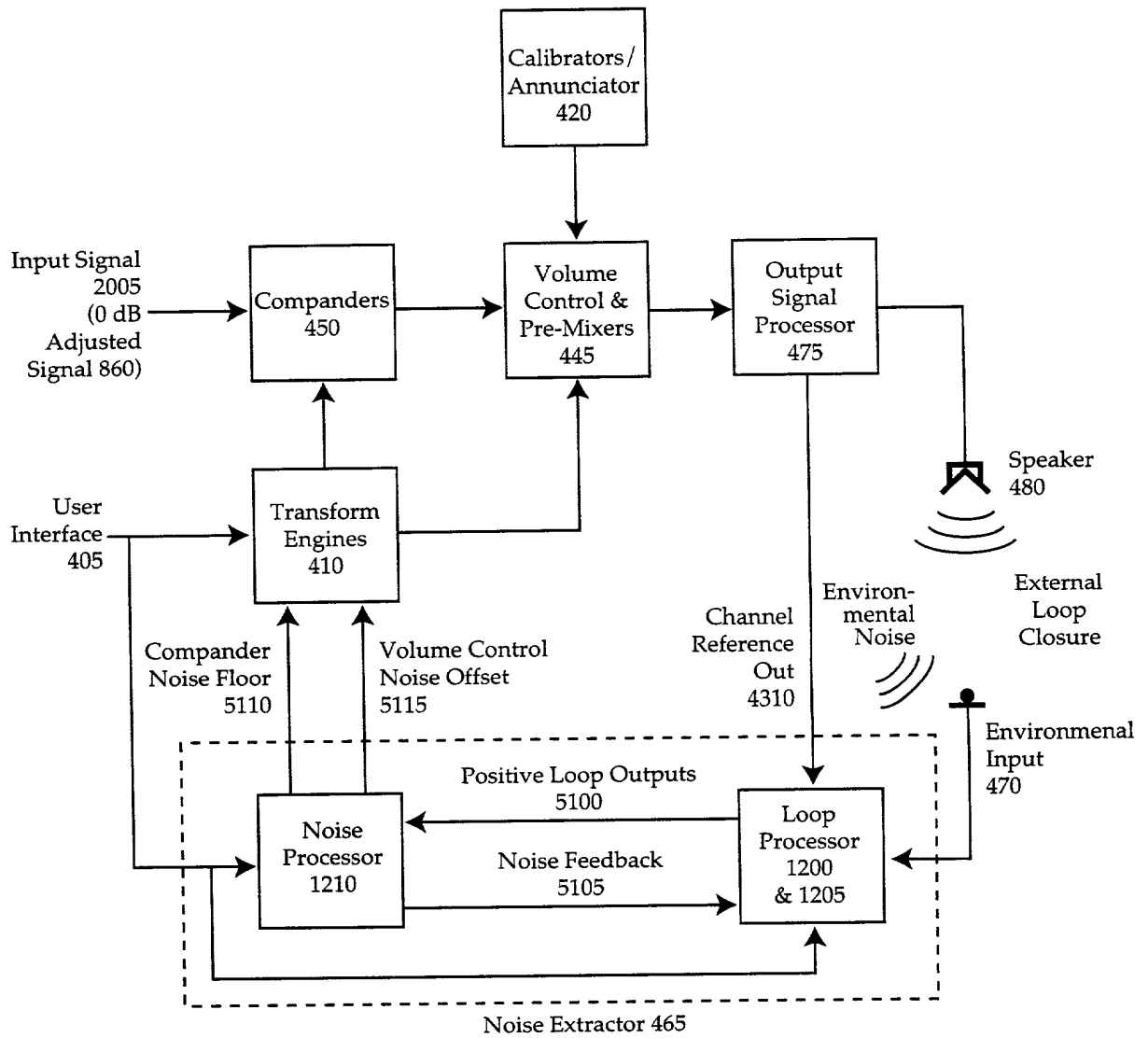


FIG. 51

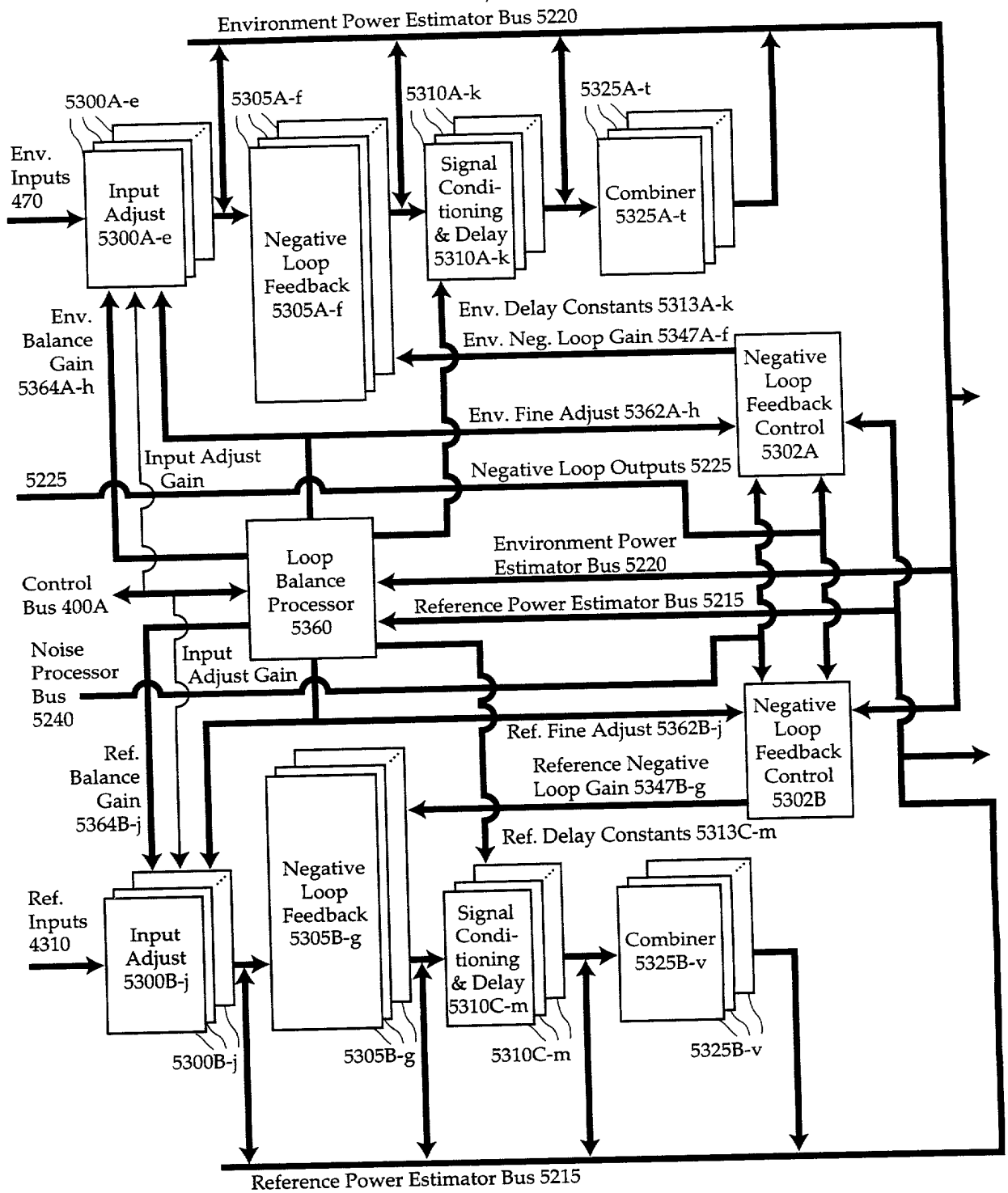


FIG. 52A

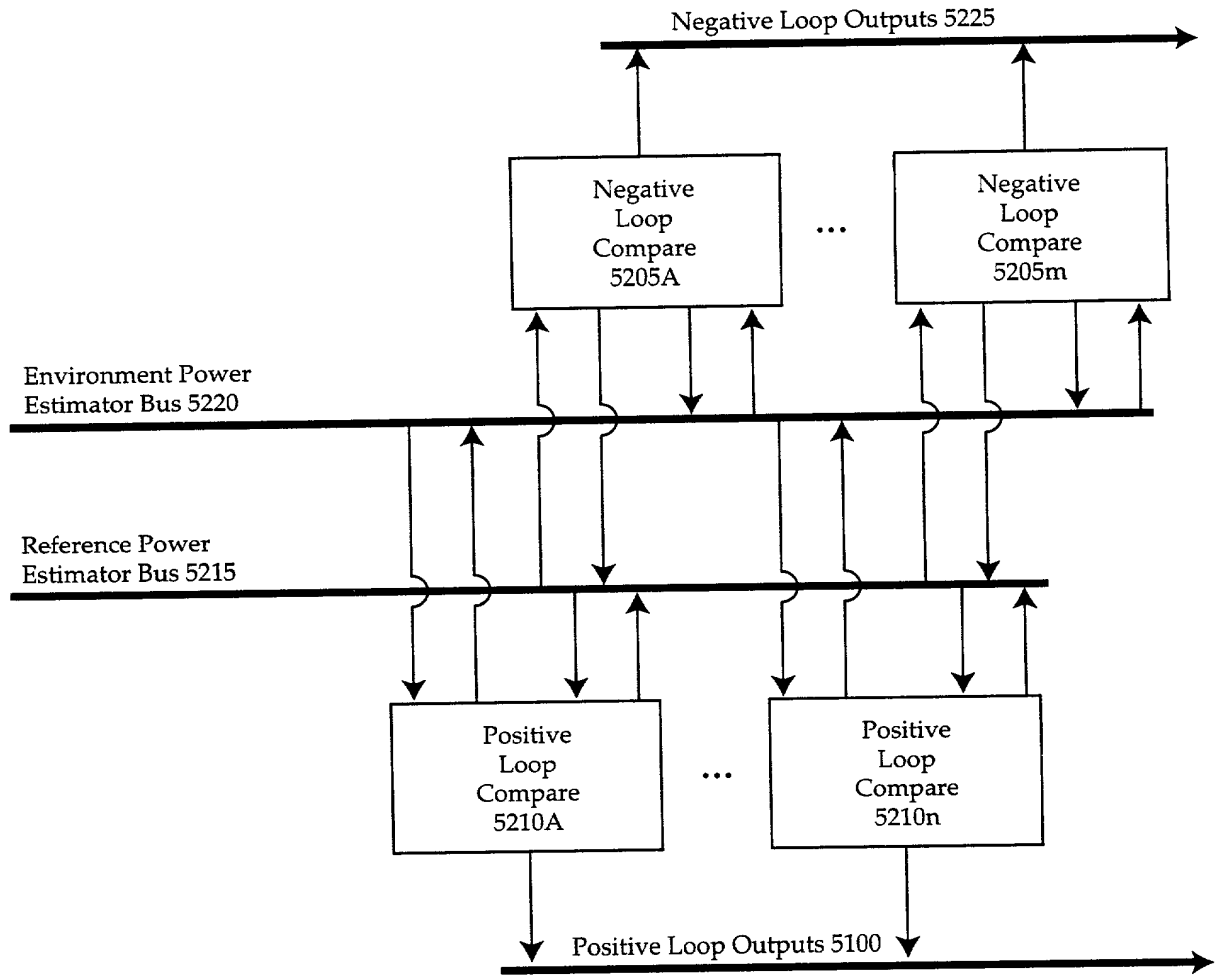


FIG. 52B

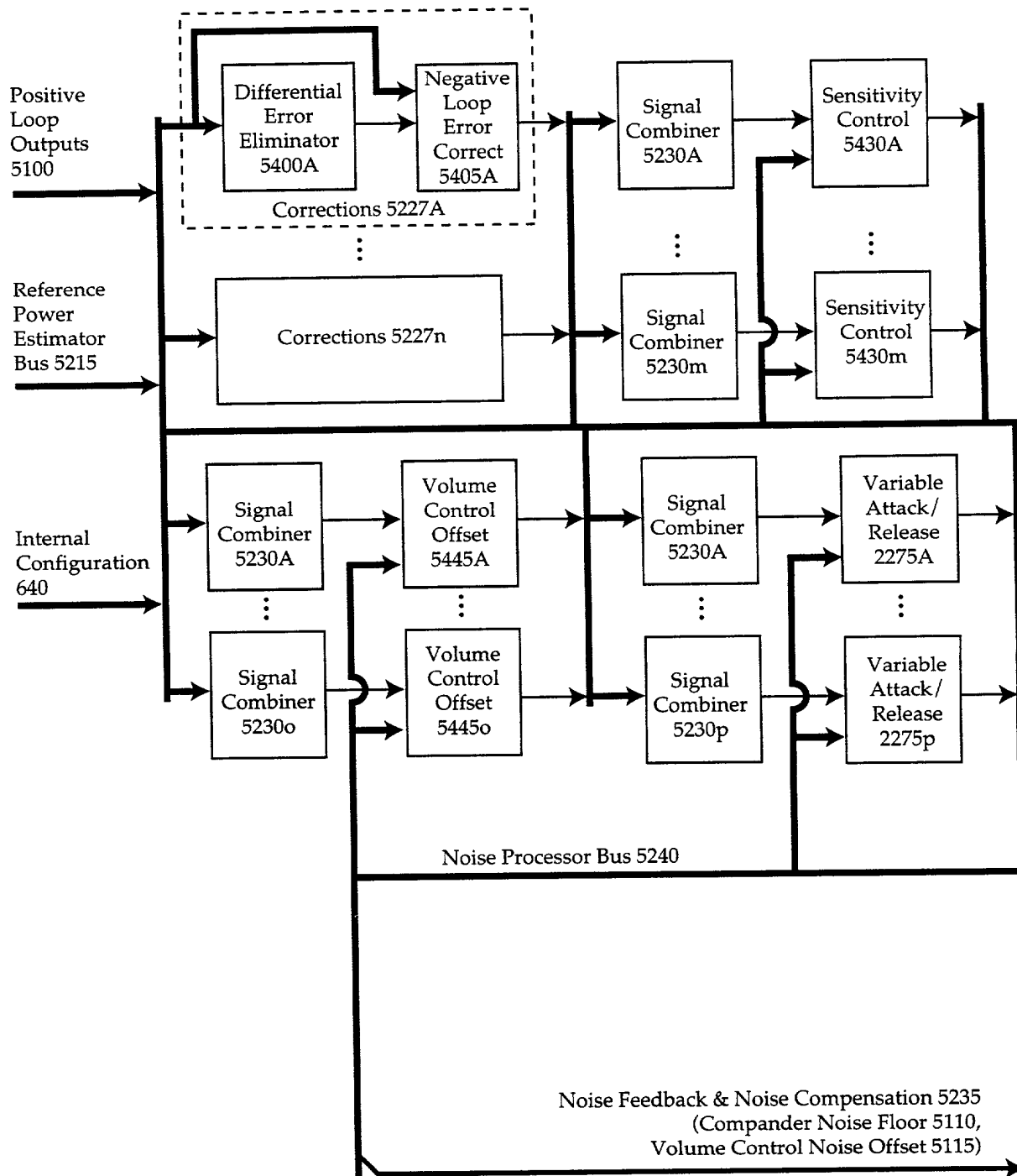


FIG. 52C

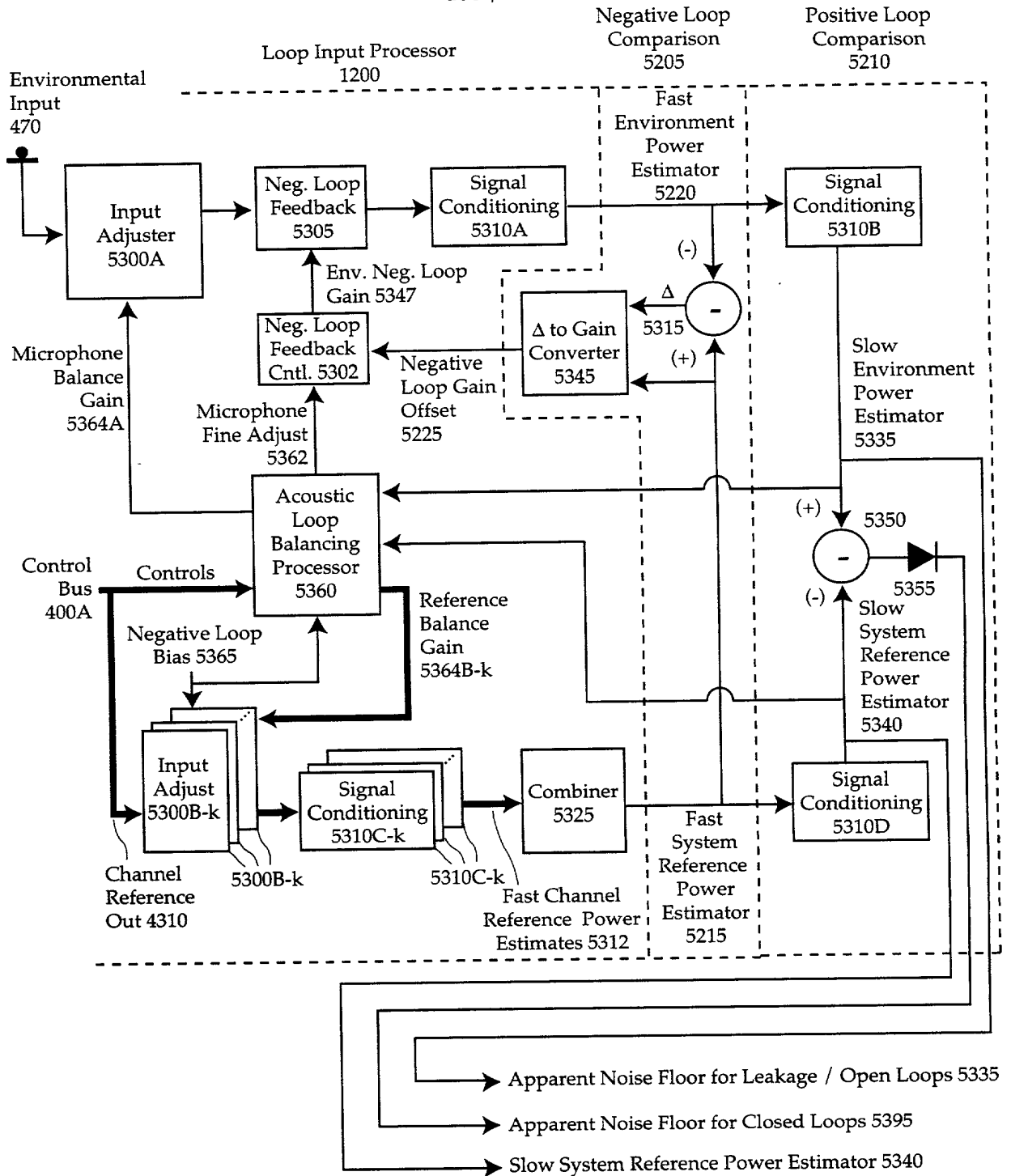
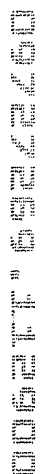


FIG. 53A



1.

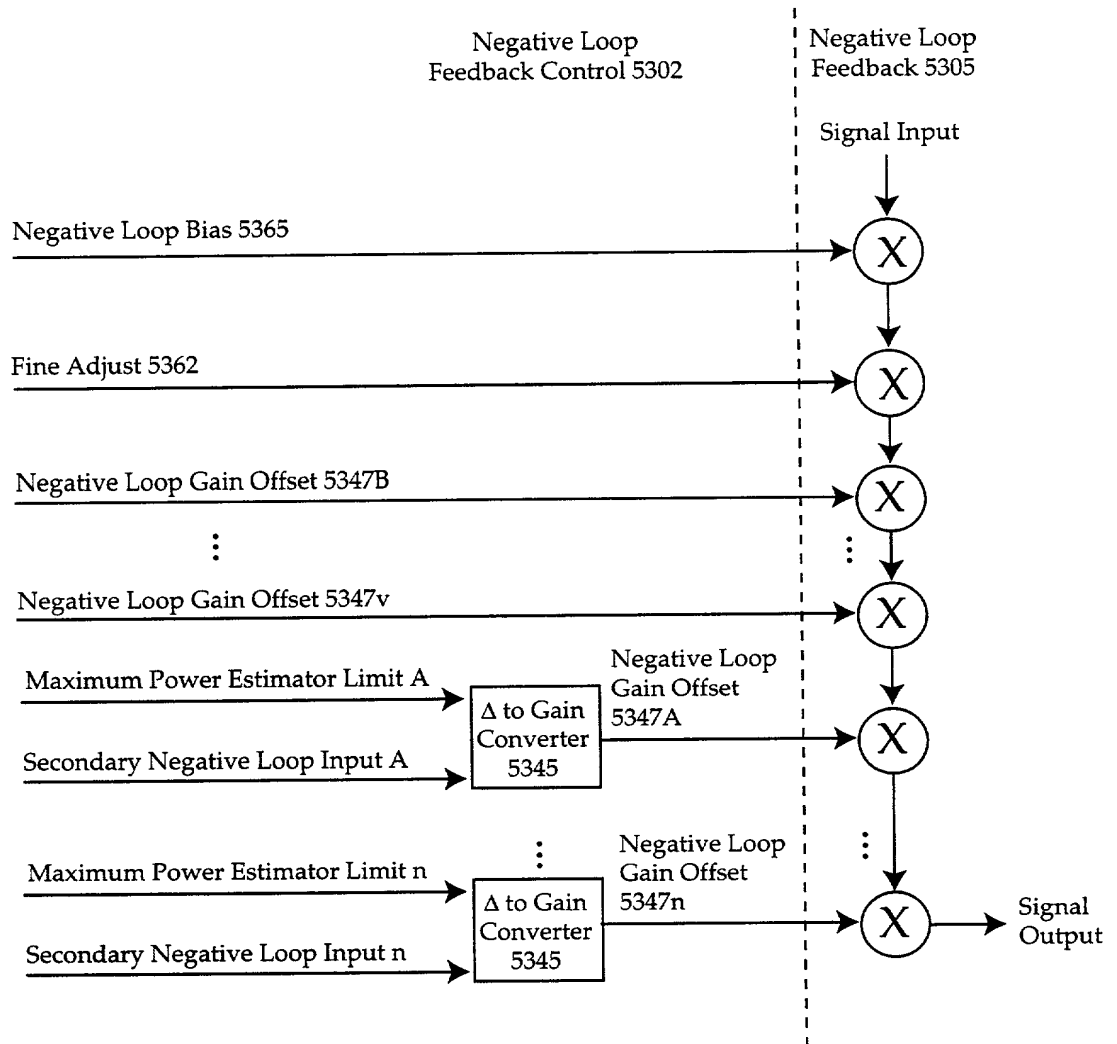


FIG. 53C

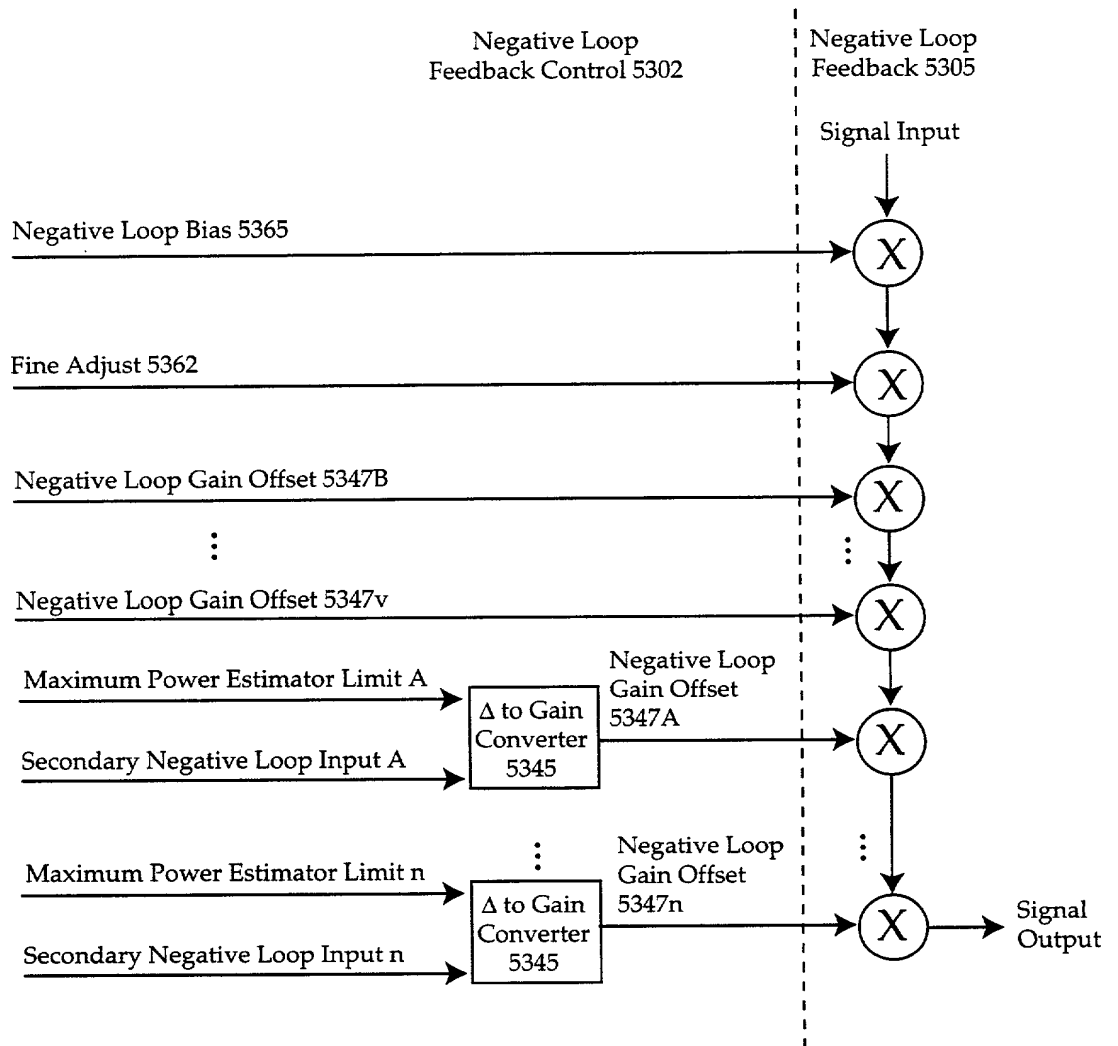


FIG. 53C

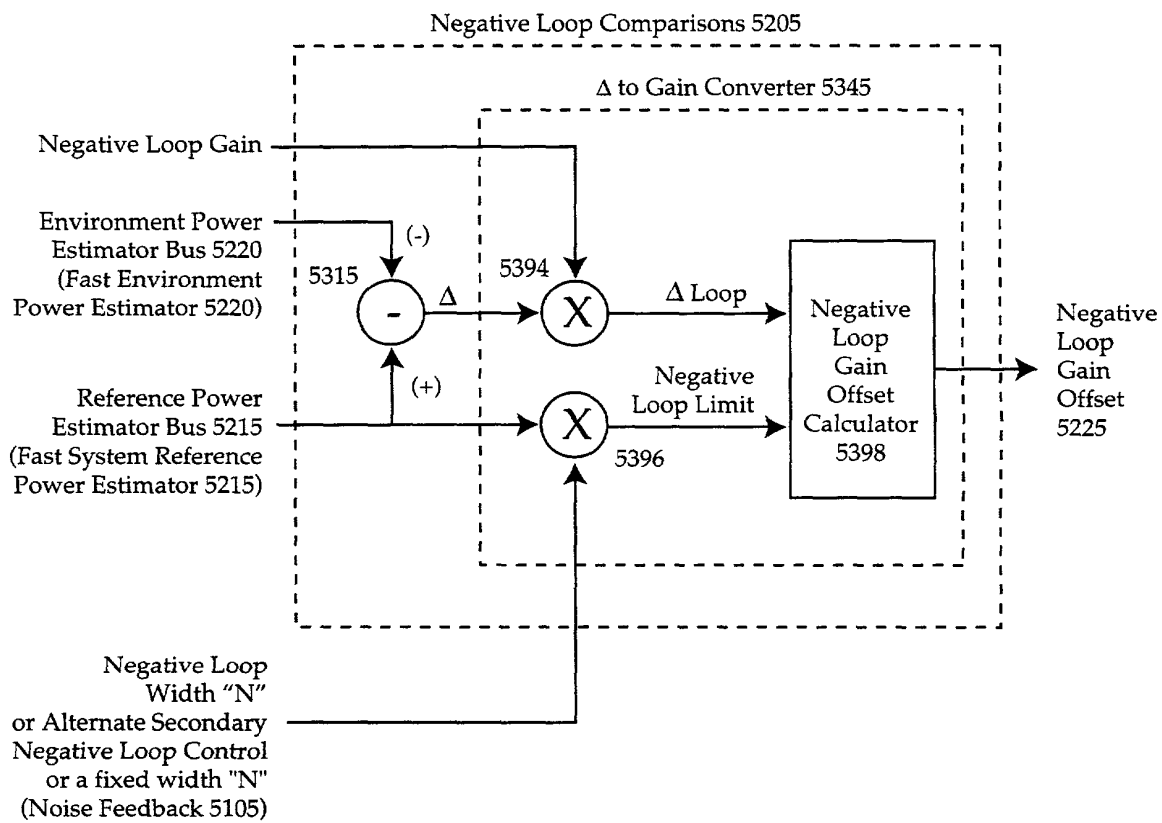


FIG. 53D

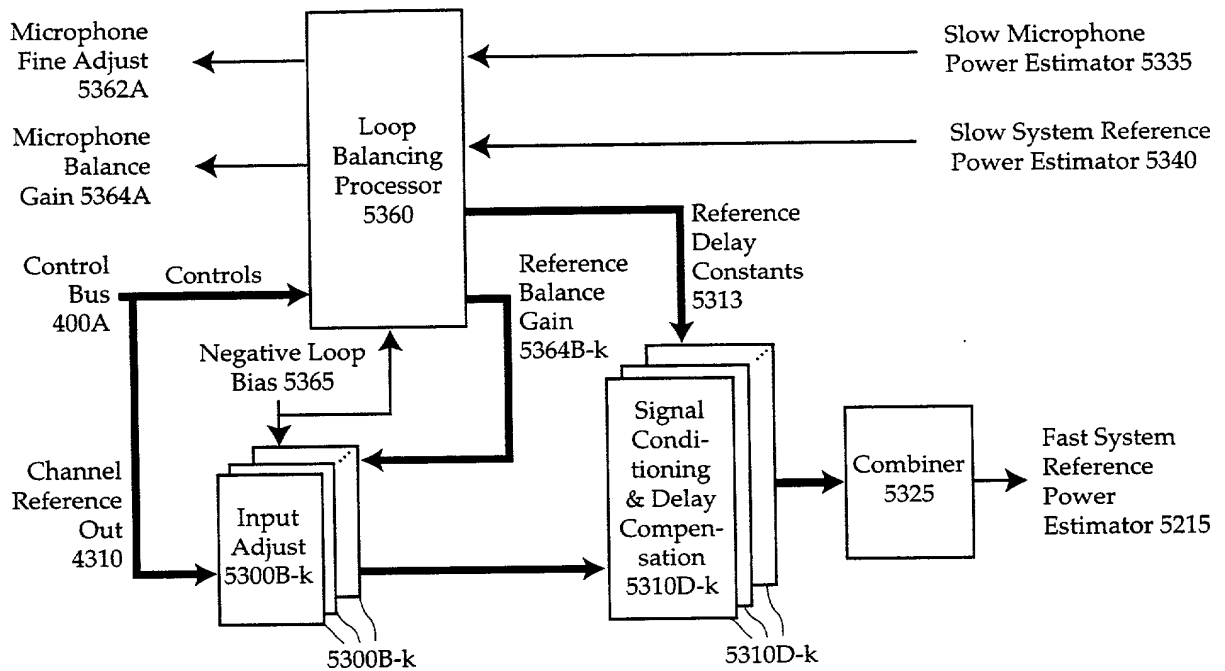


FIG. 53E

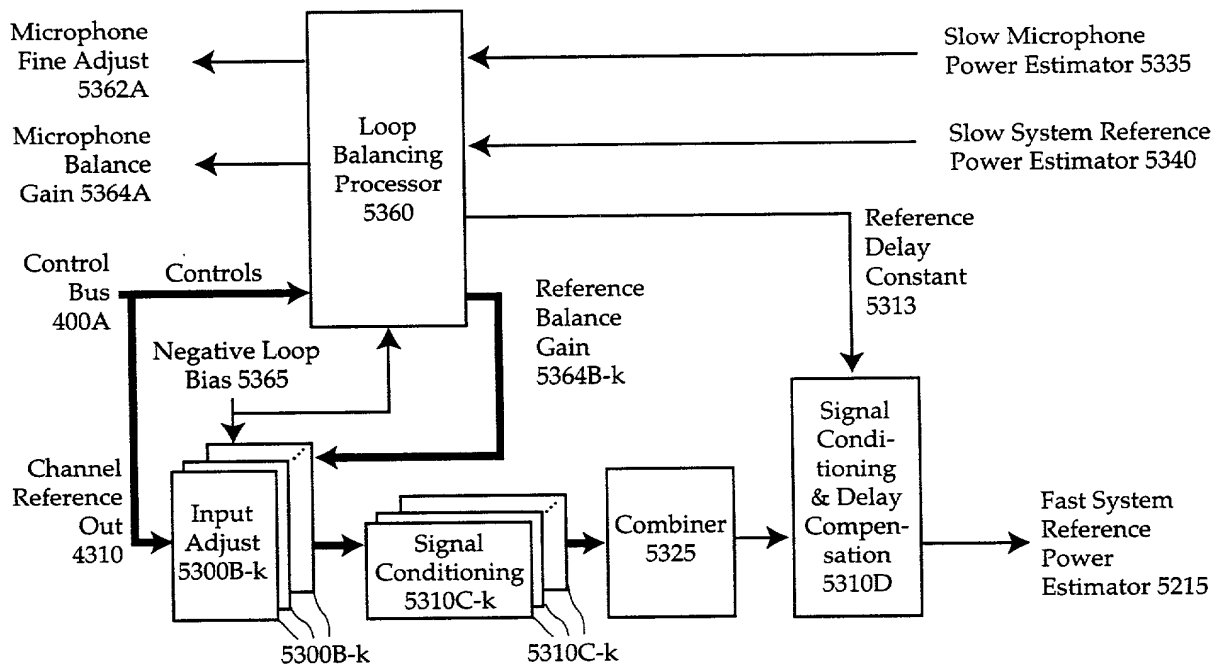


FIG. 53F

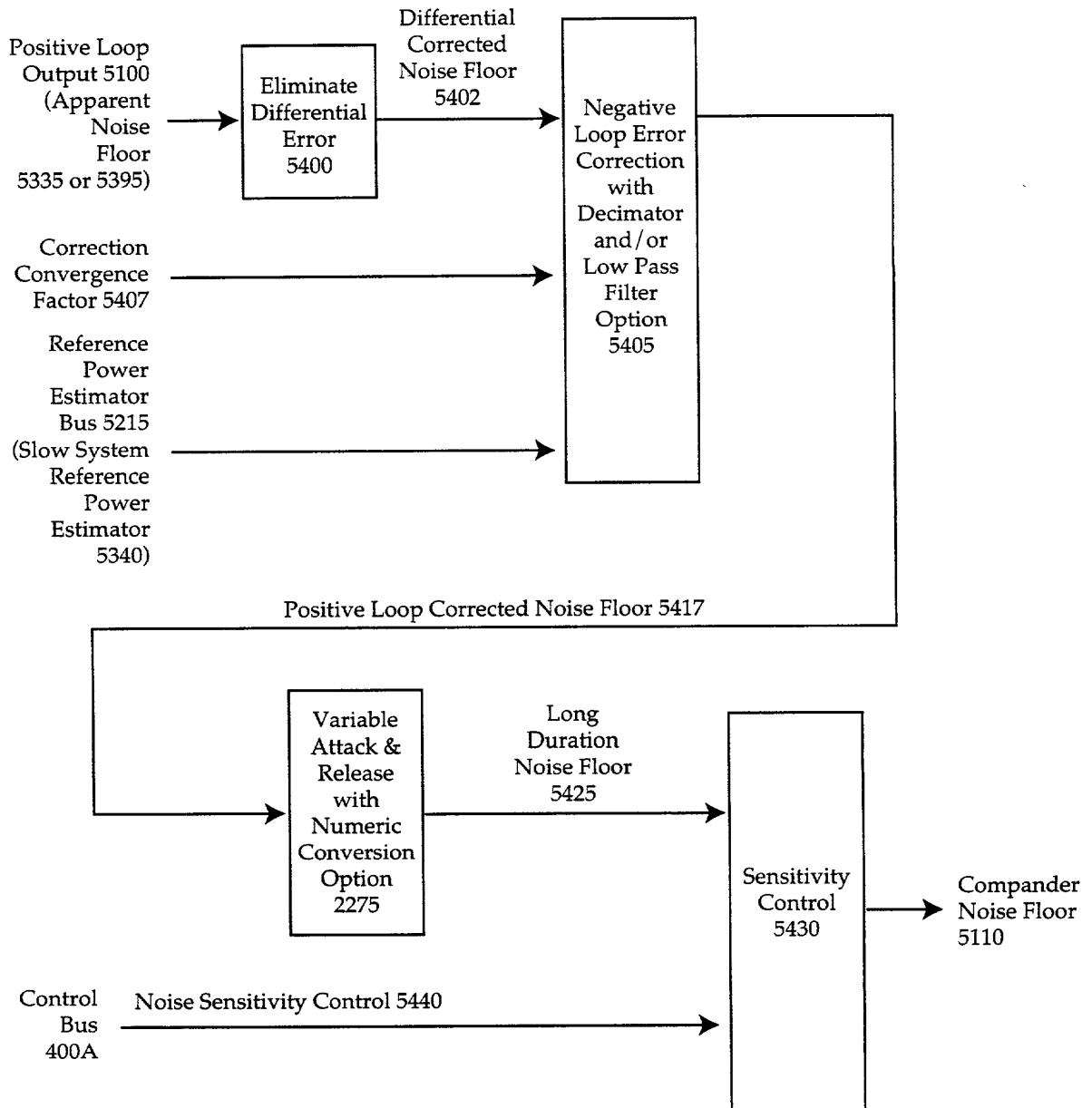


FIG. 54A

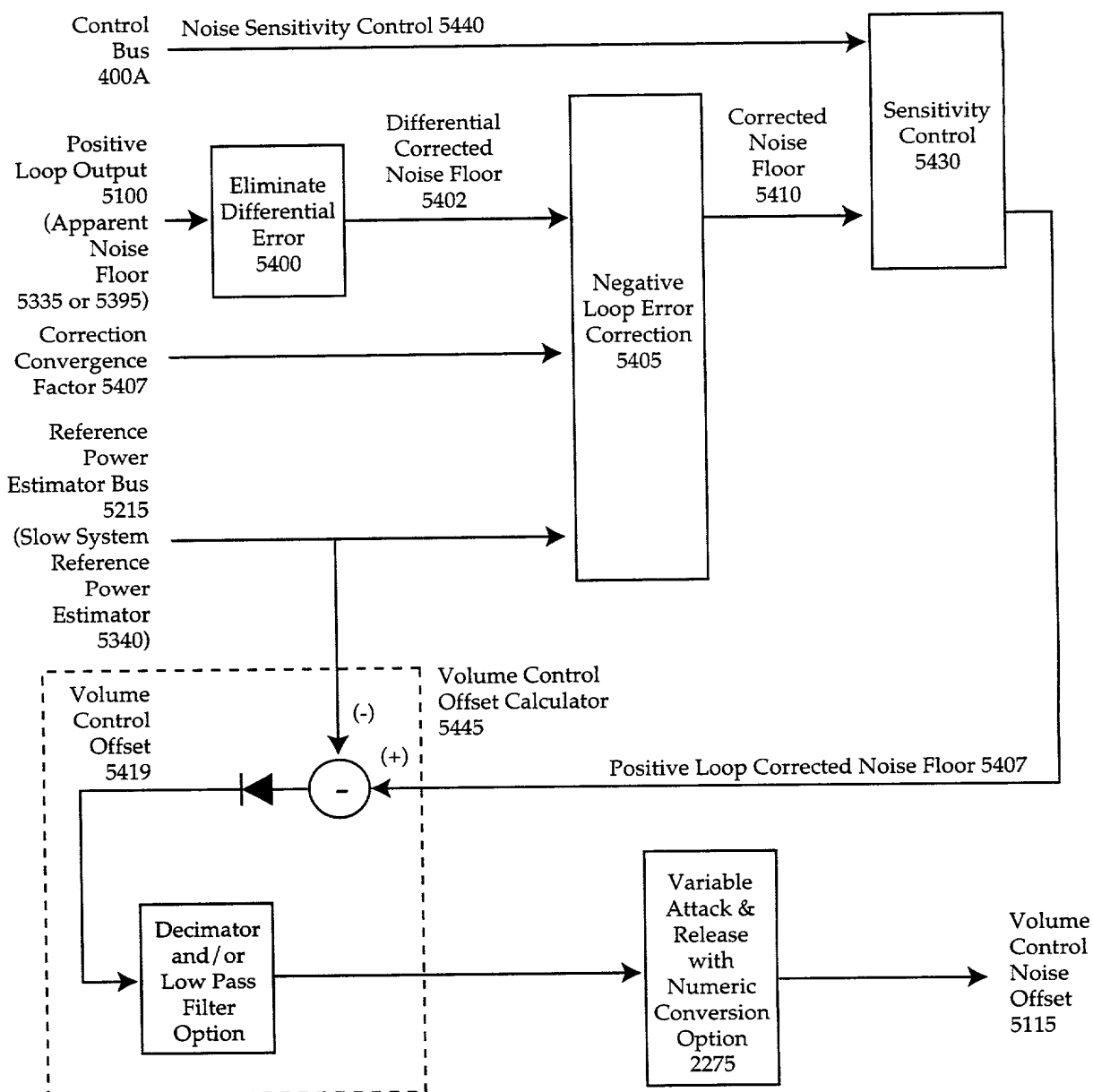


FIG. 54B

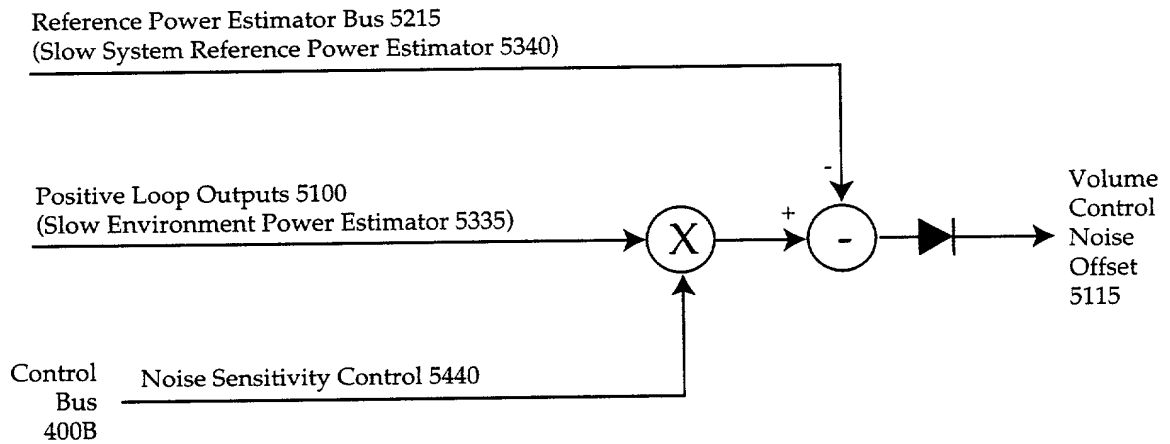


FIG. 54C

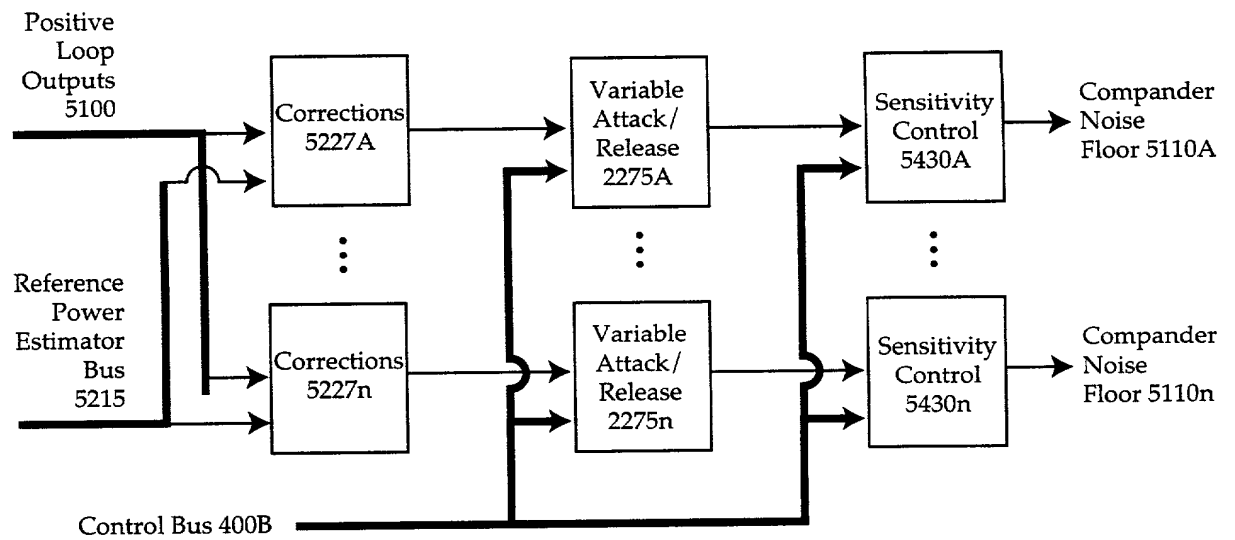


FIG. 54D

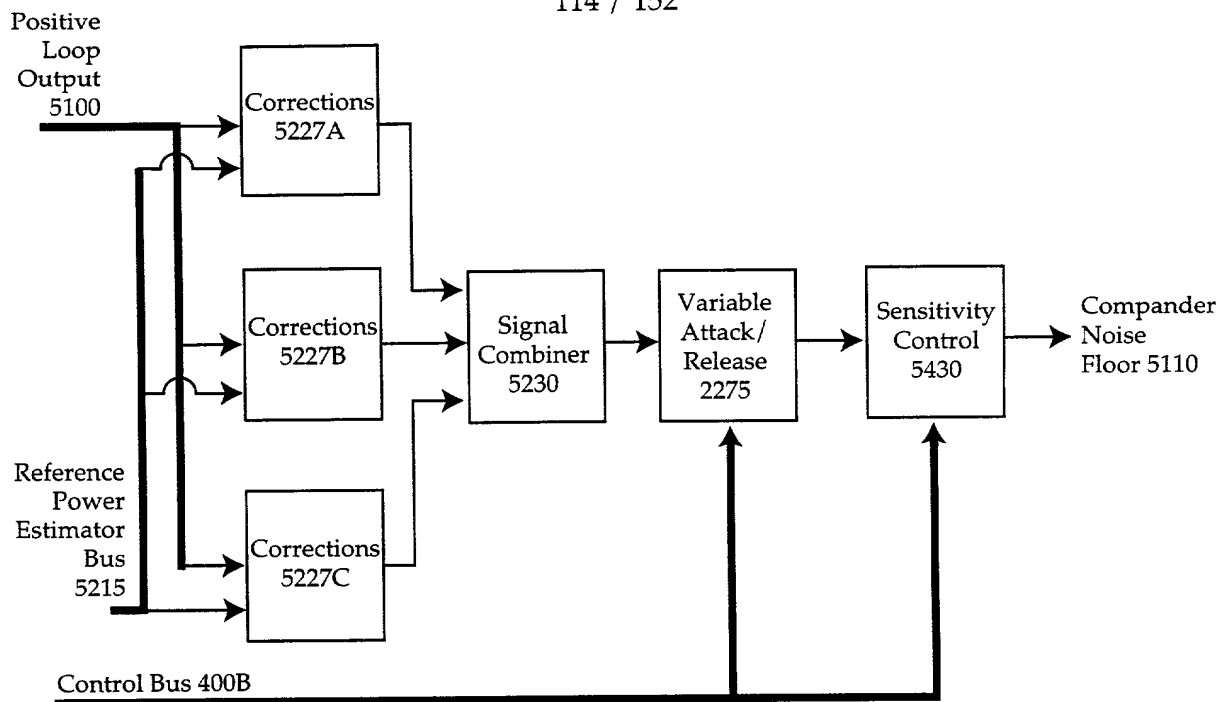


FIG. 54E

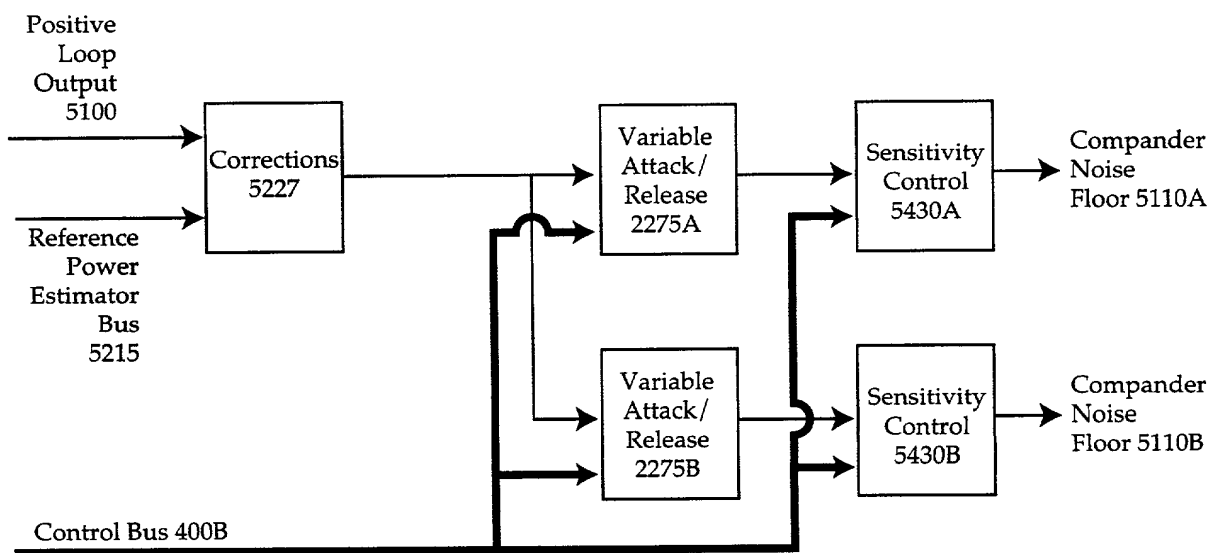


FIG. 54F

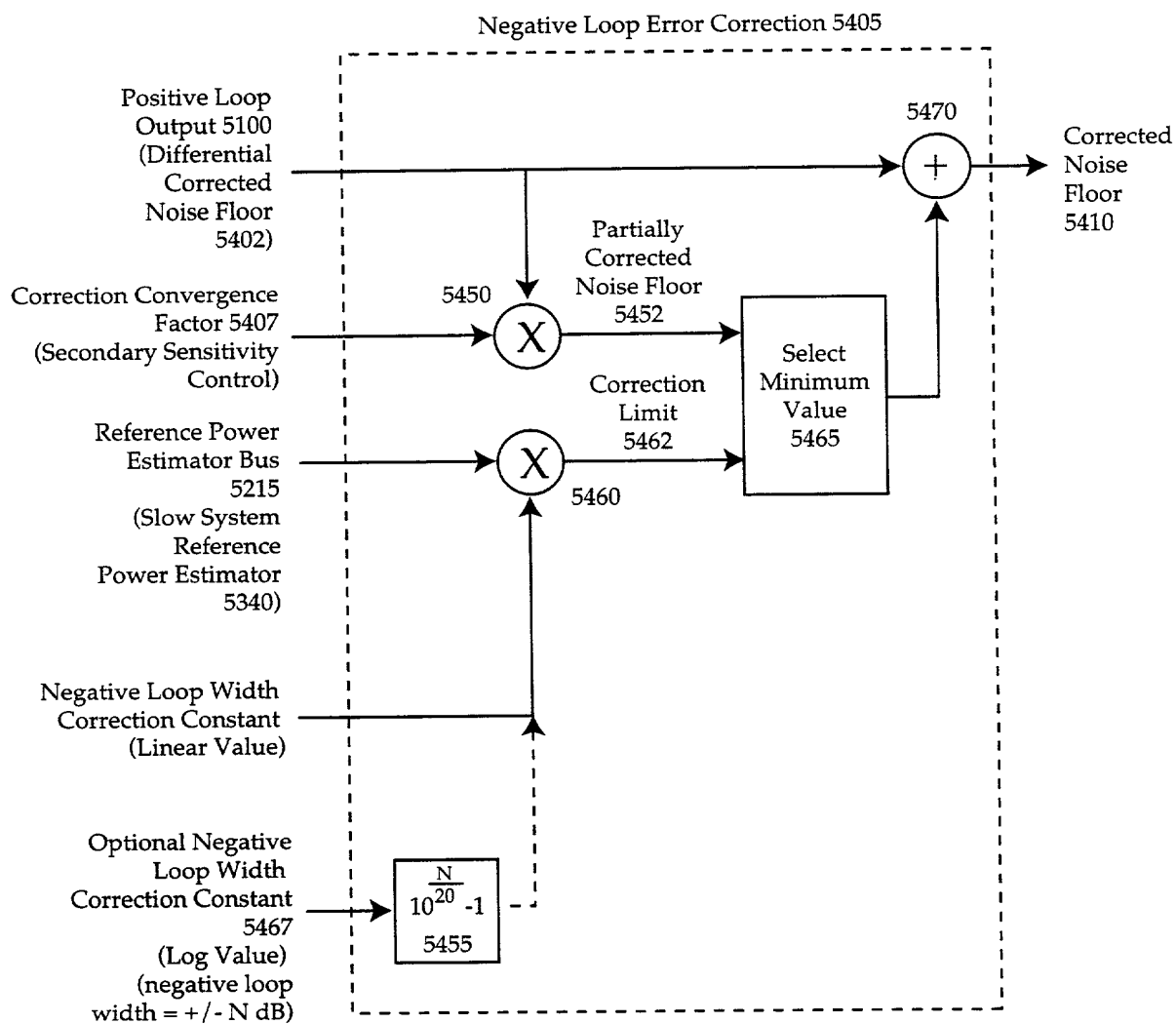


FIG. 54G

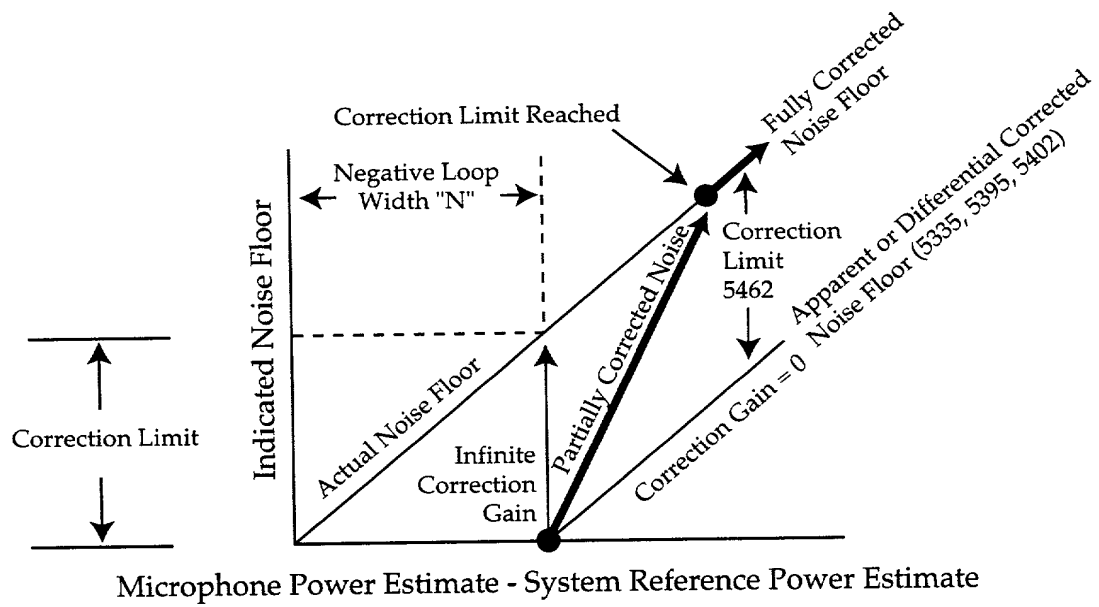


FIG. 54H

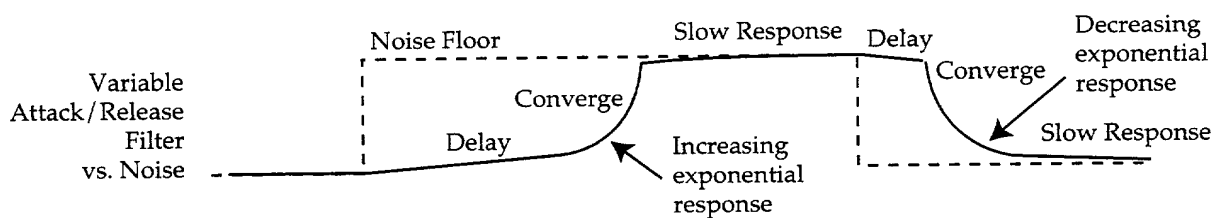
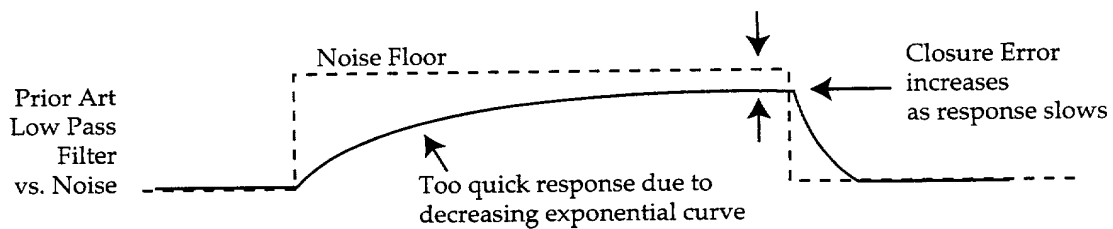


FIG. 55A

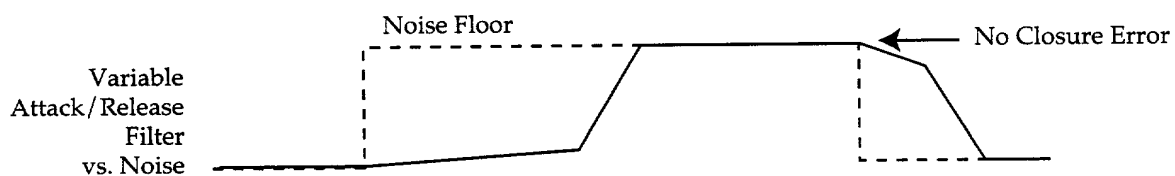
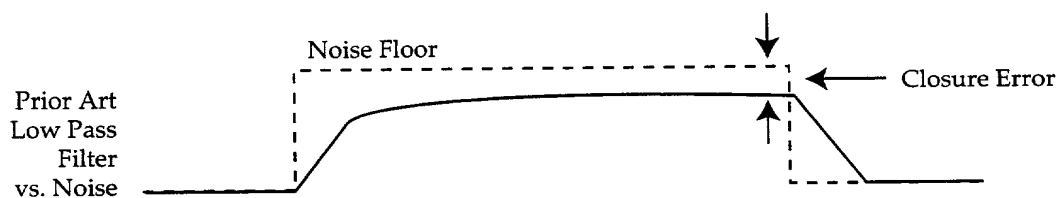


FIG. 55B

09727269-11300

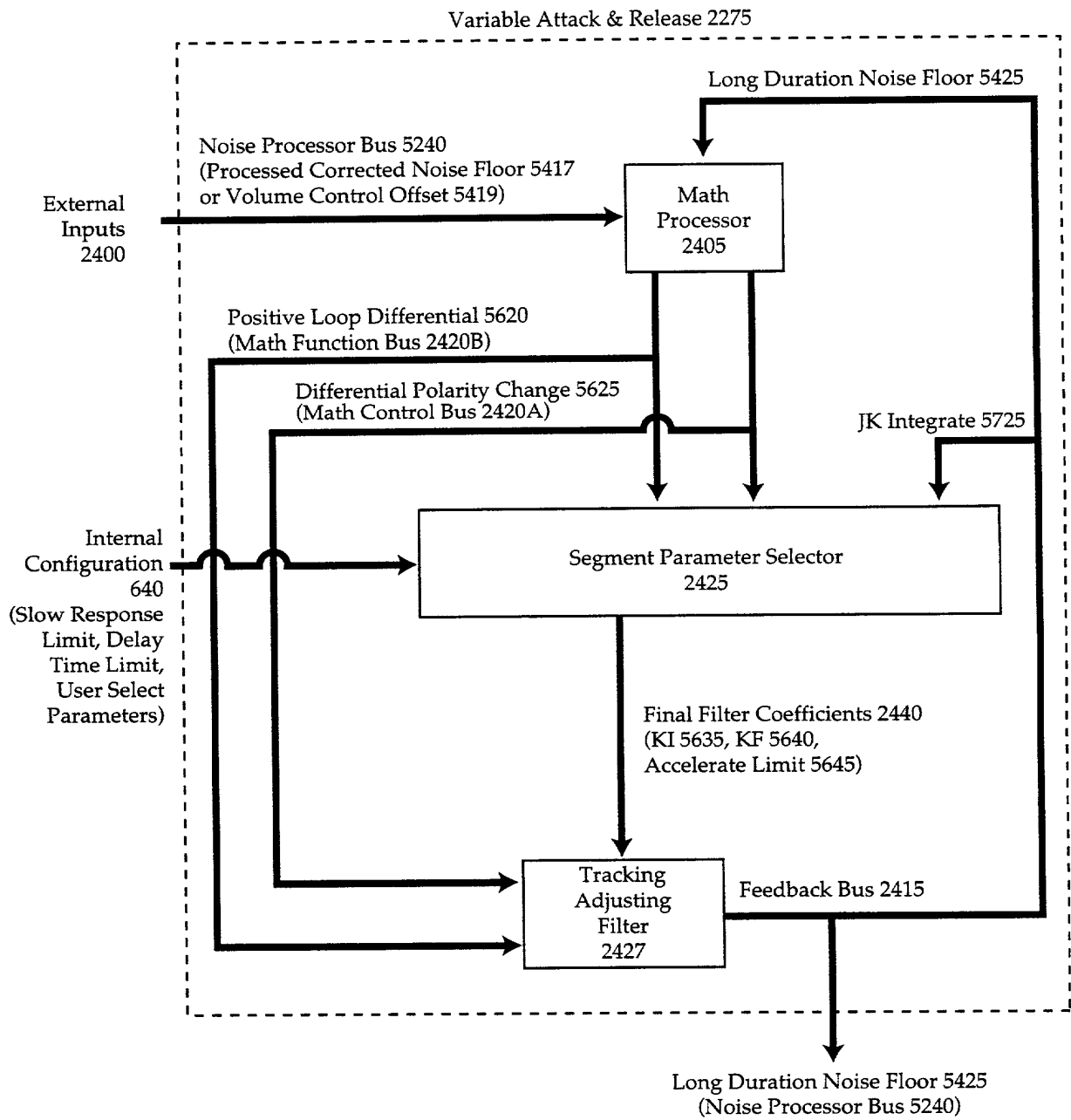


FIG. 55C

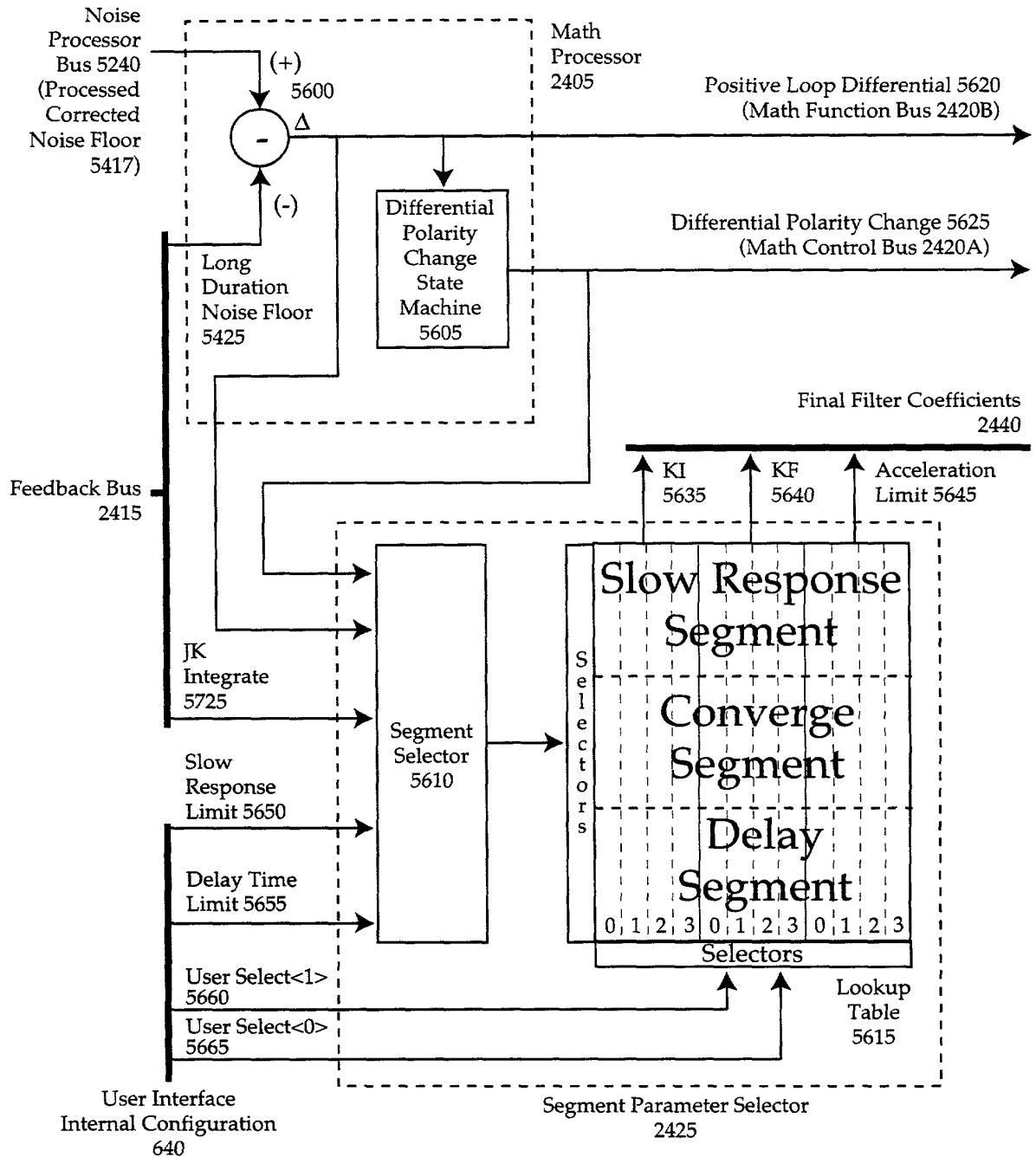
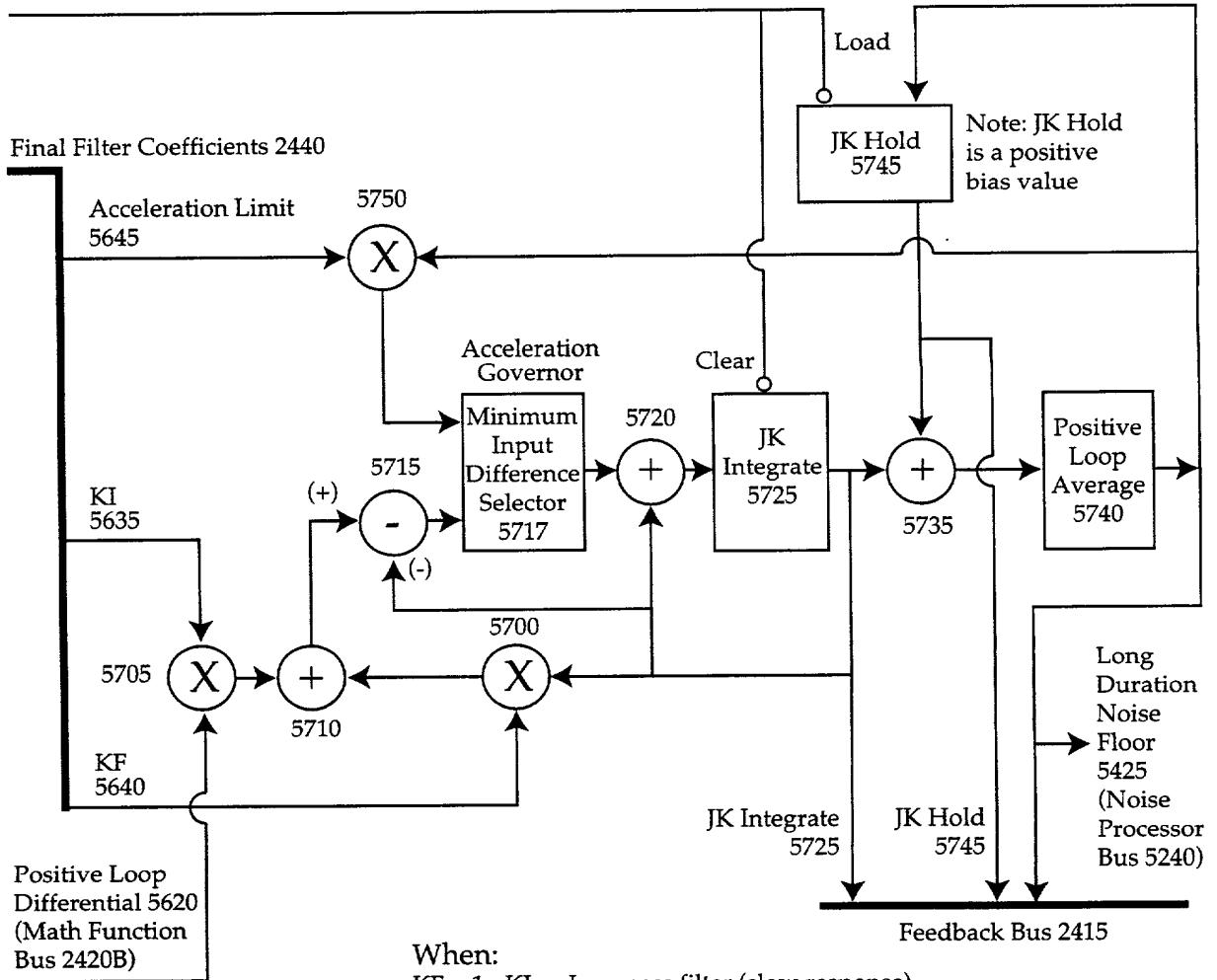


FIG. 56

Differential Polarity Change 5625
(Math Control Bus 2420A)



When:

- KF = 1 - KI Low pass filter (slow response)
- KF = 1 Integrator (delay response)
- KF > 1 Accelerating Integrator (converge)

FIG. 57A

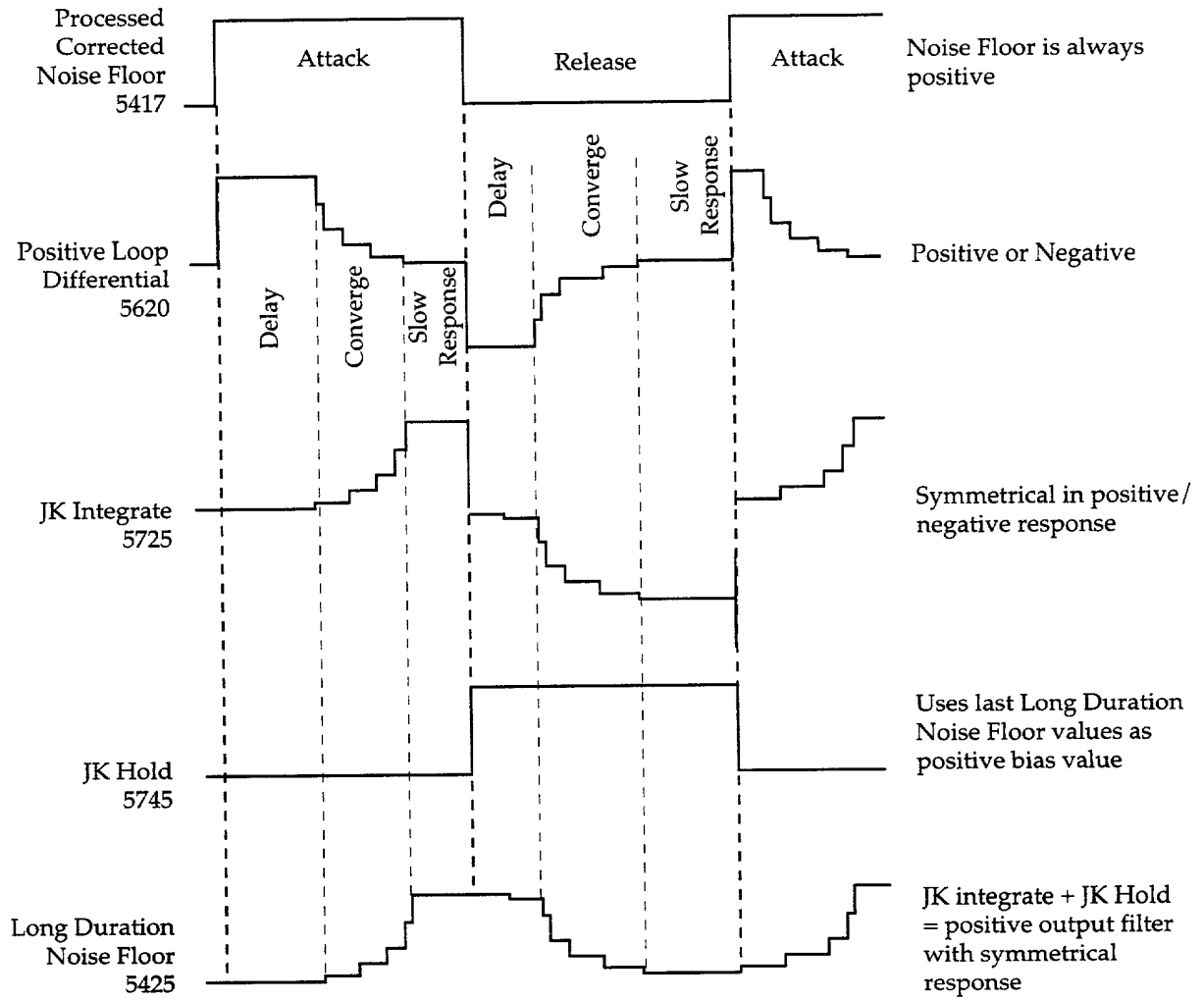


FIG. 57B

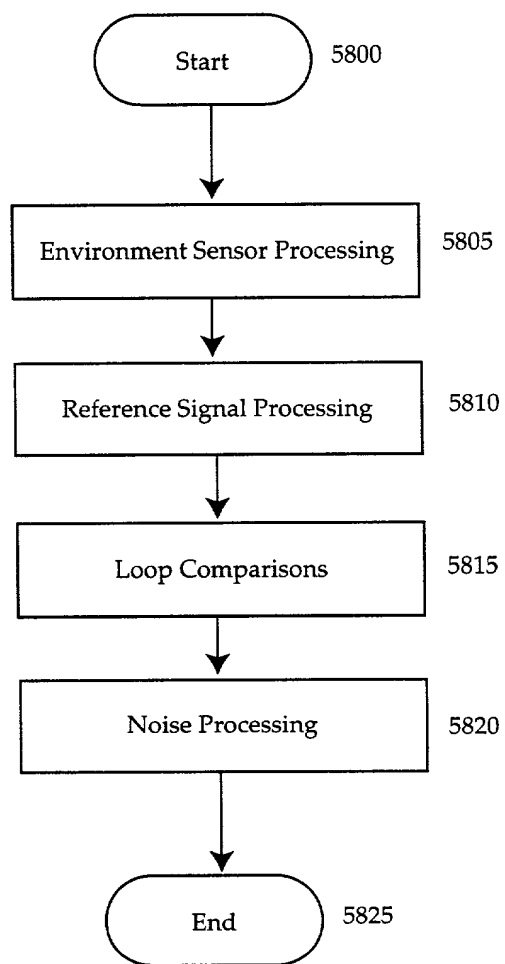


FIG. 58

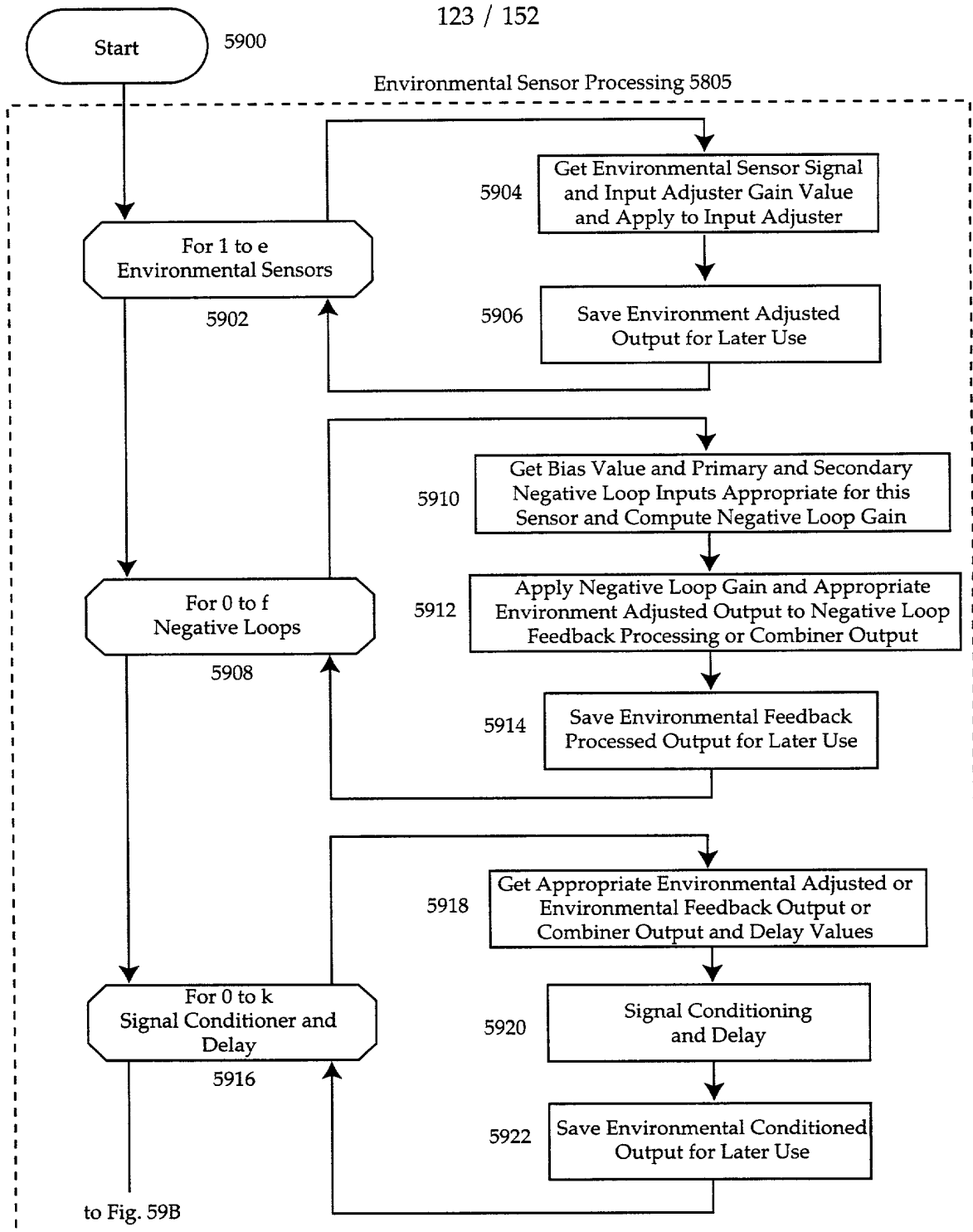


FIG. 59A

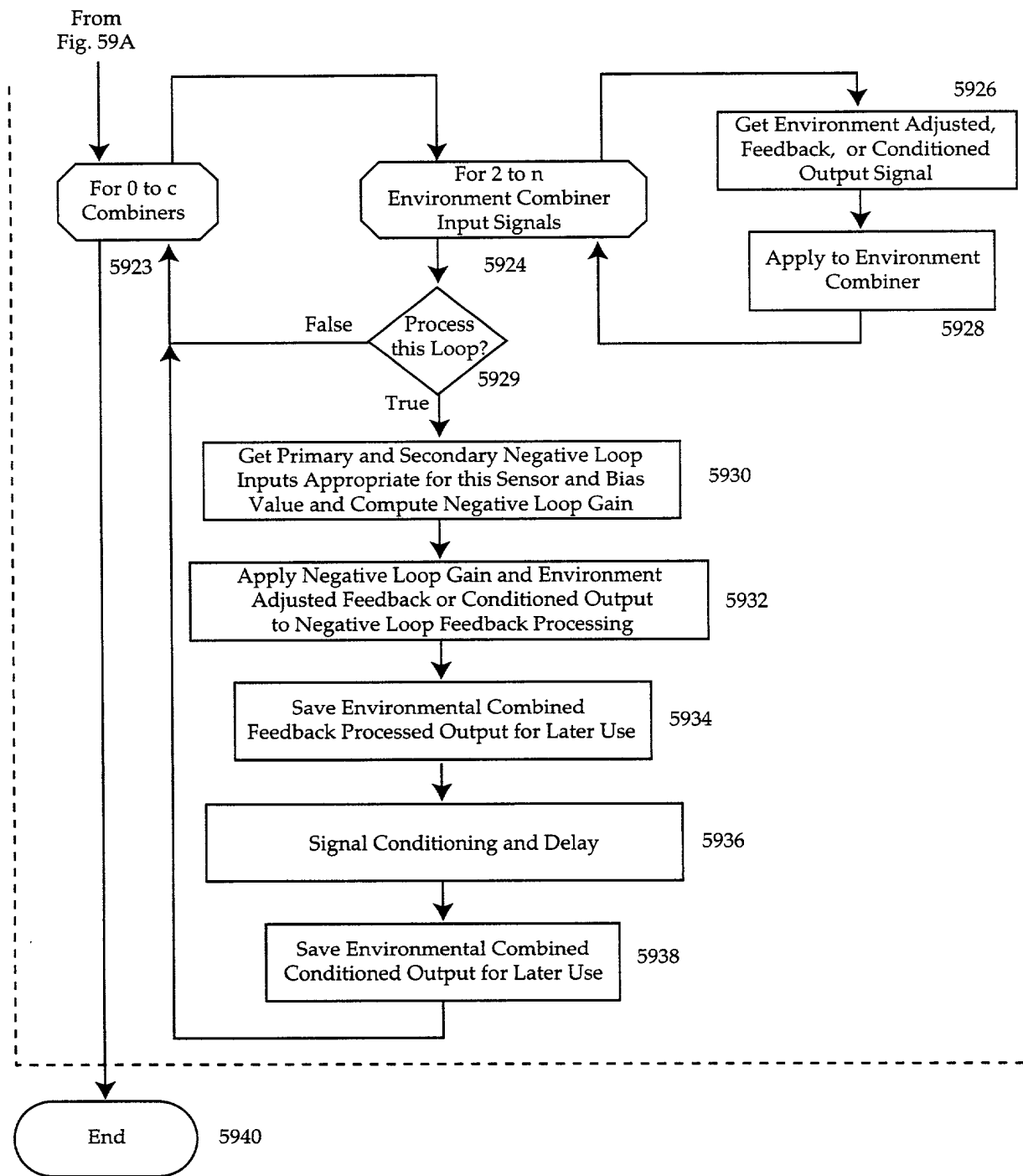


FIG. 59B

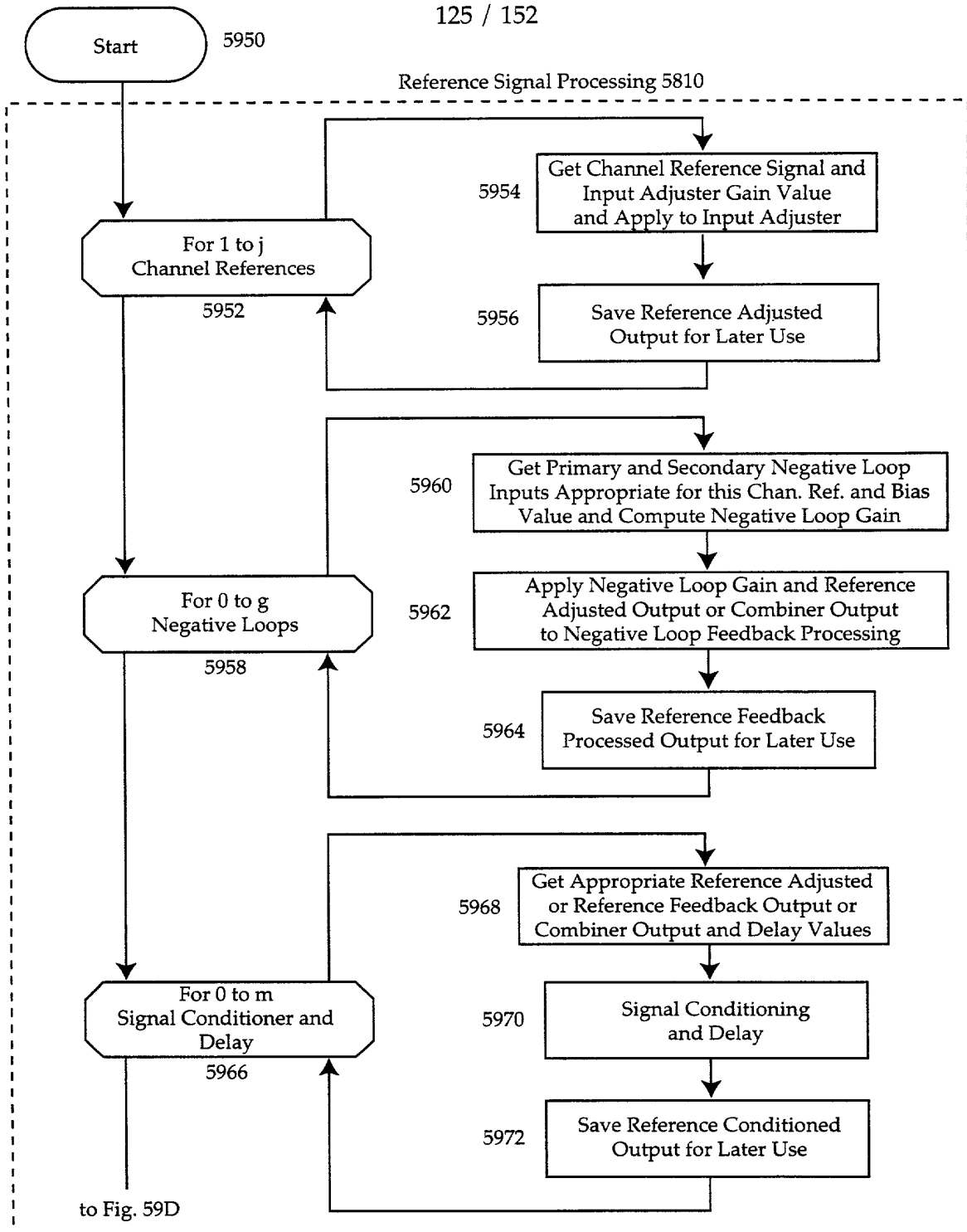


FIG. 59C

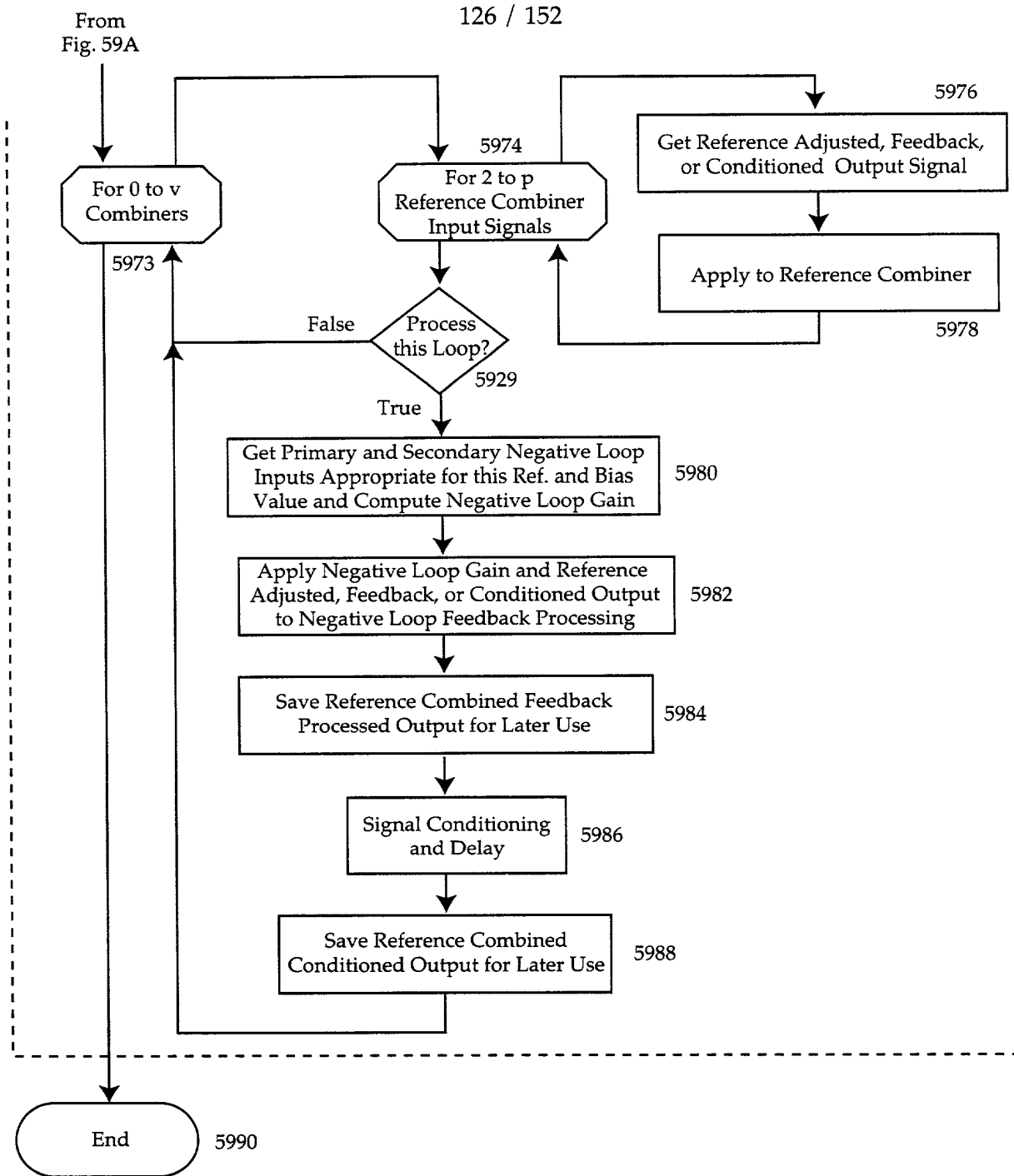


FIG. 59D

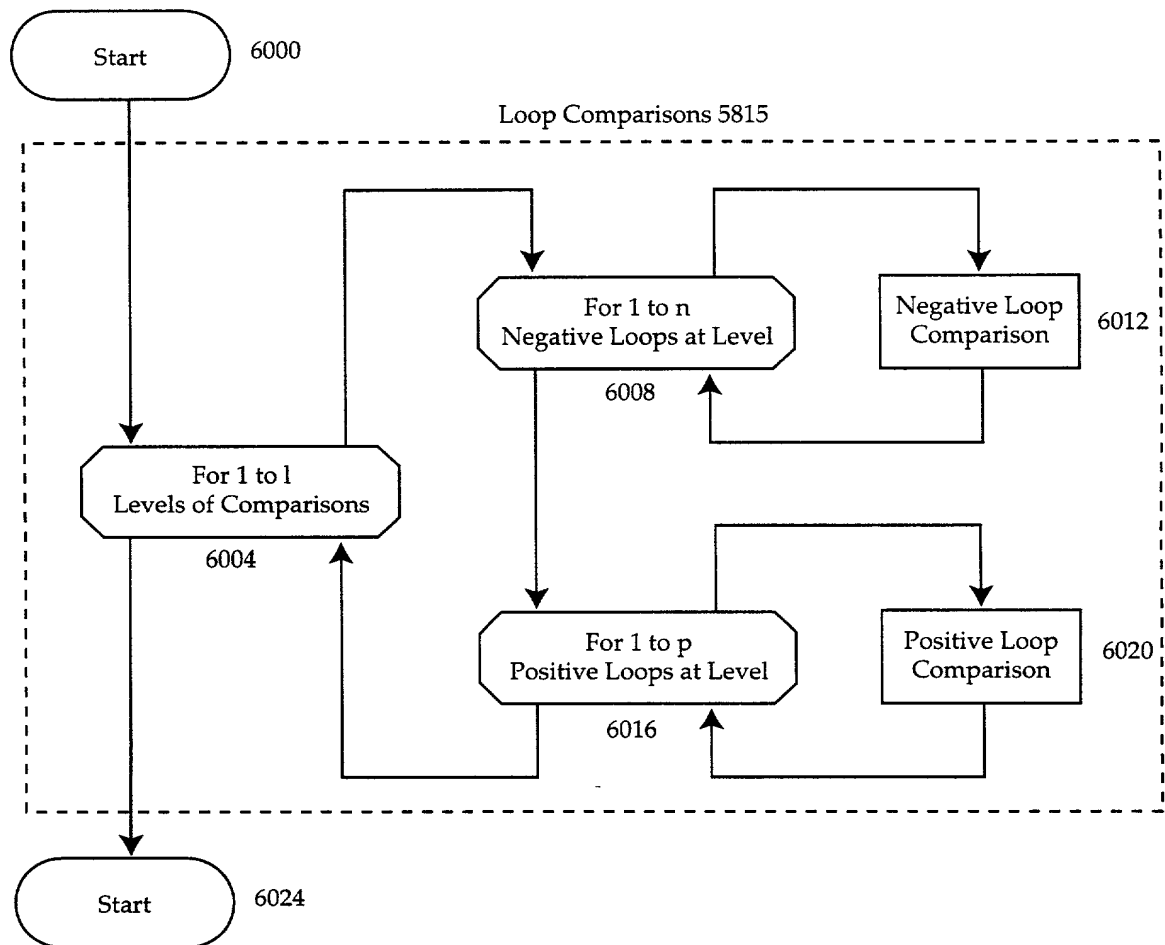


FIG. 60A

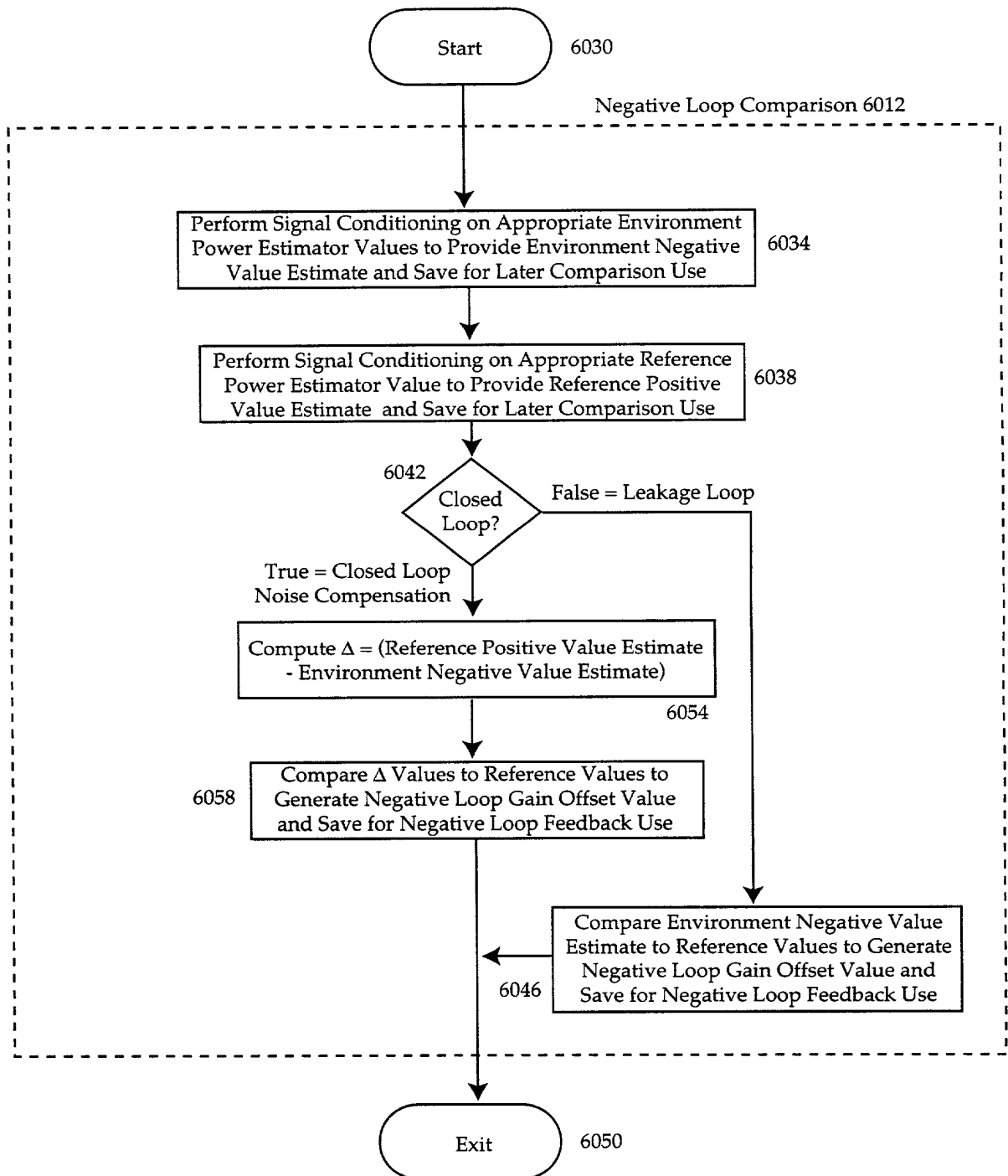


FIG. 60B

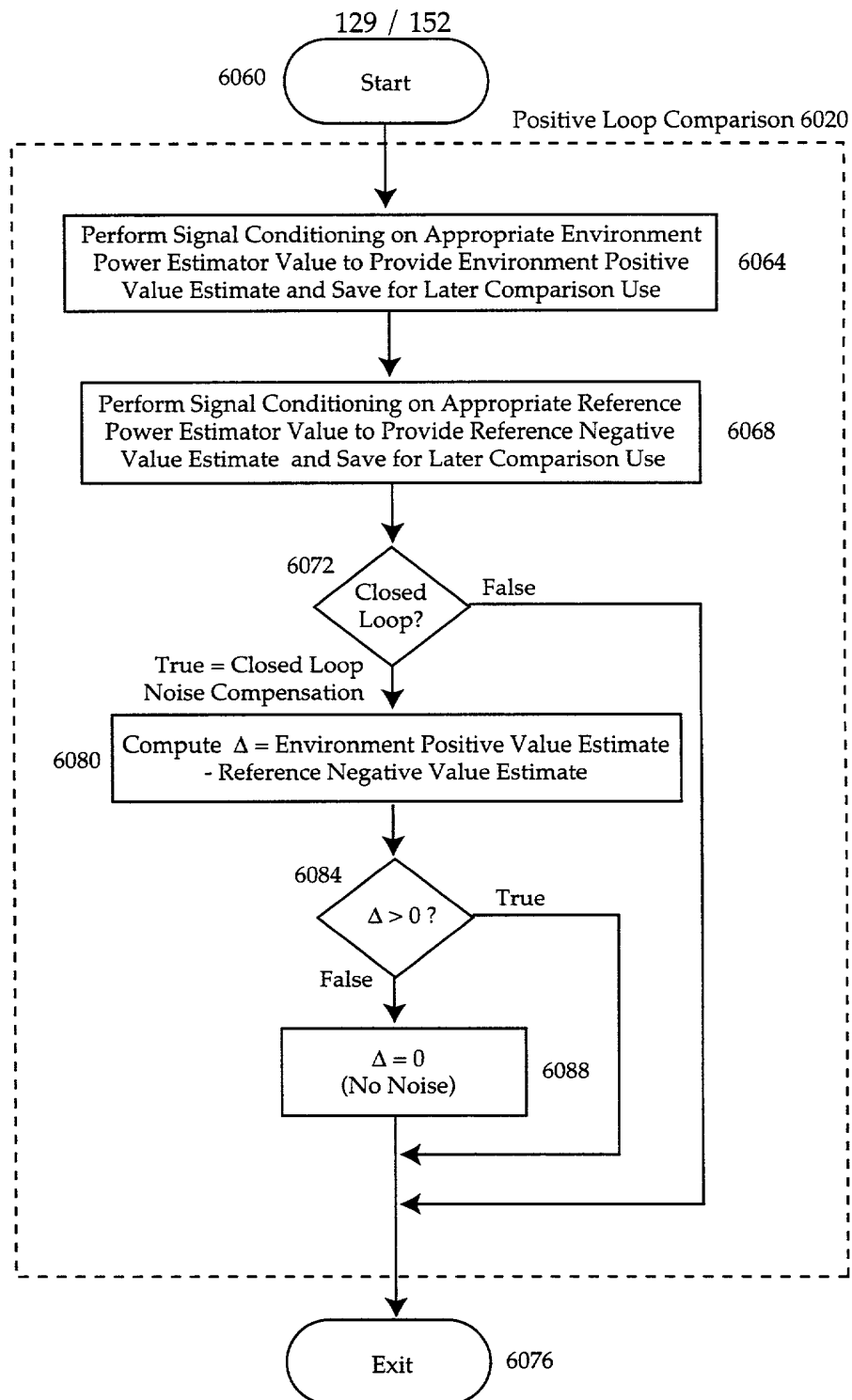


FIG. 60C

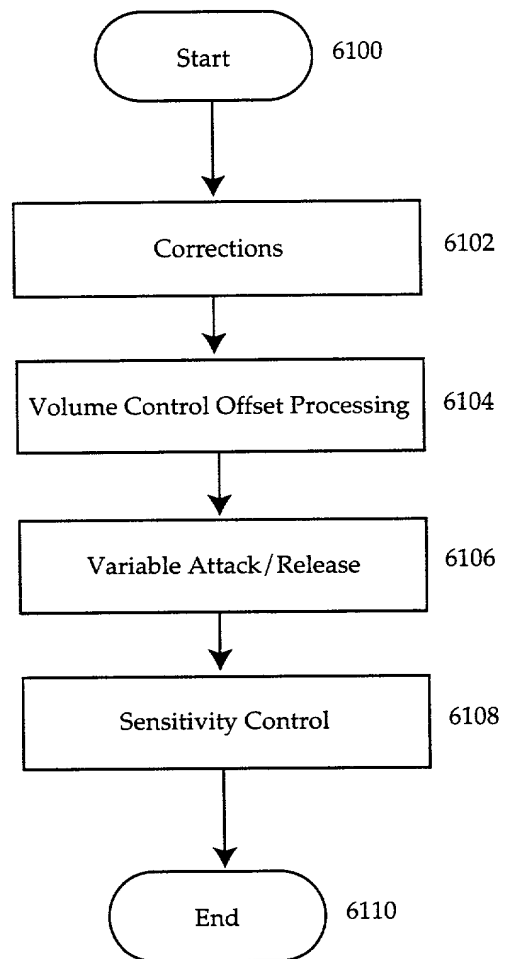


FIG. 61A

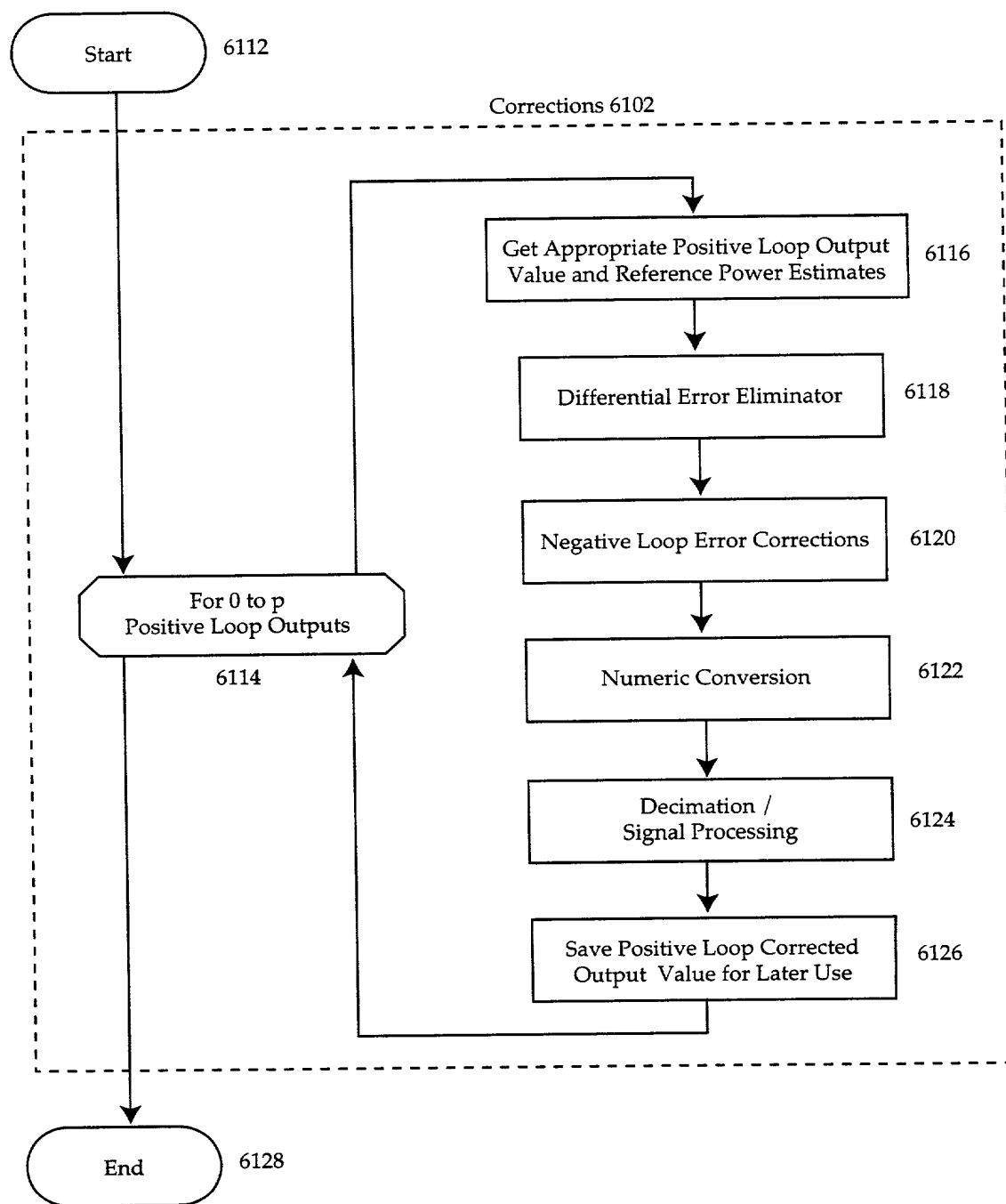


FIG. 61B

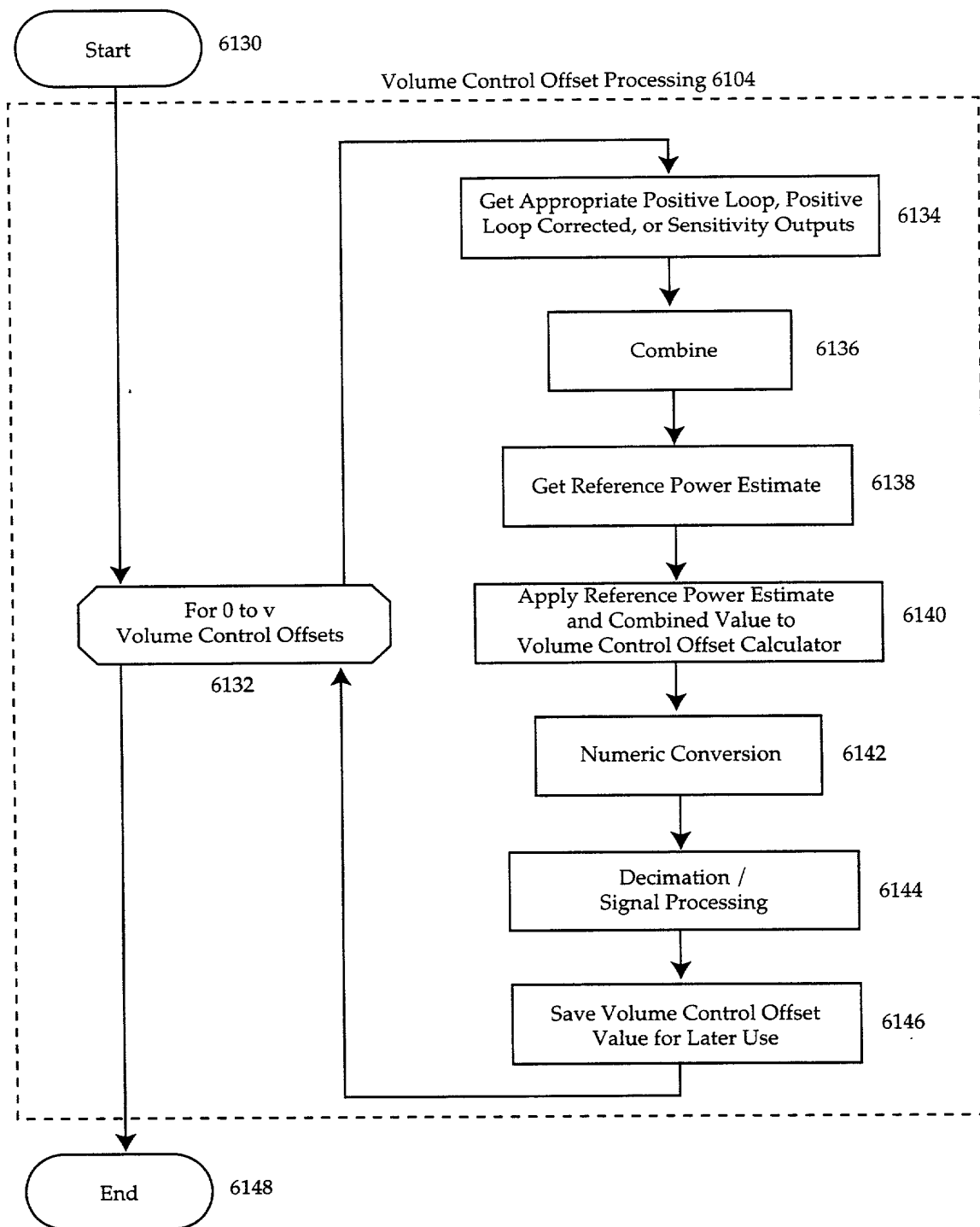


FIG. 61C

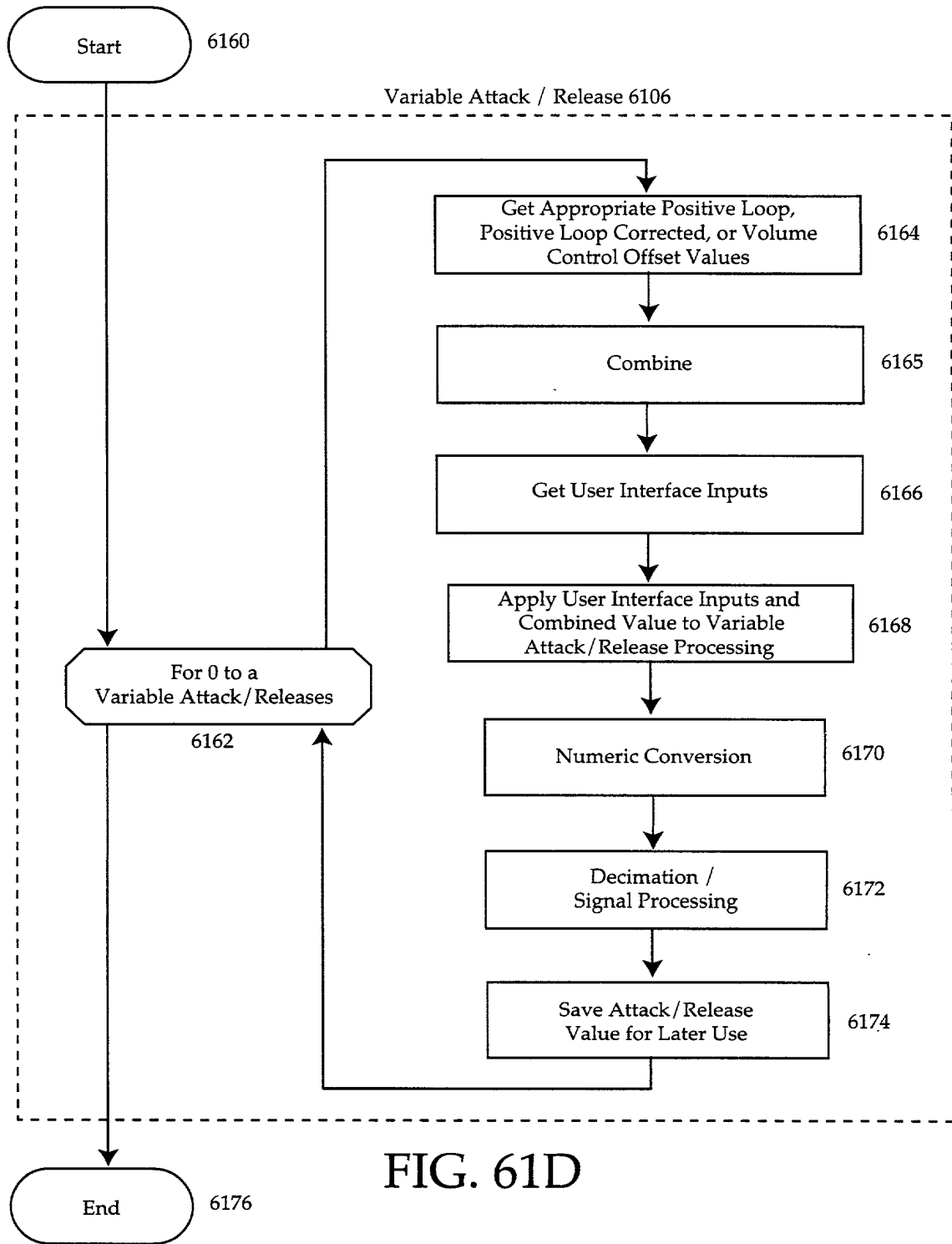


FIG. 61D

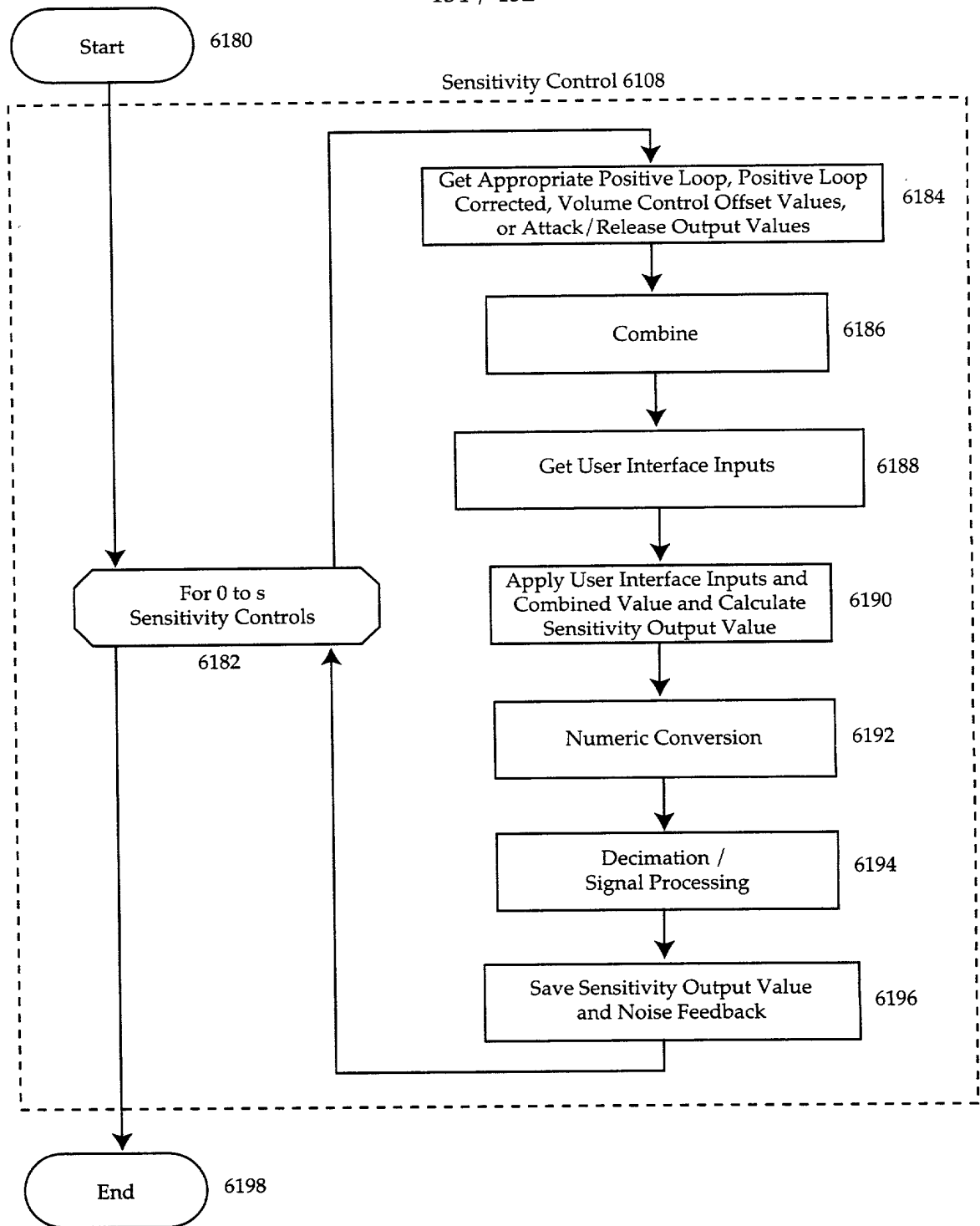


FIG. 61E

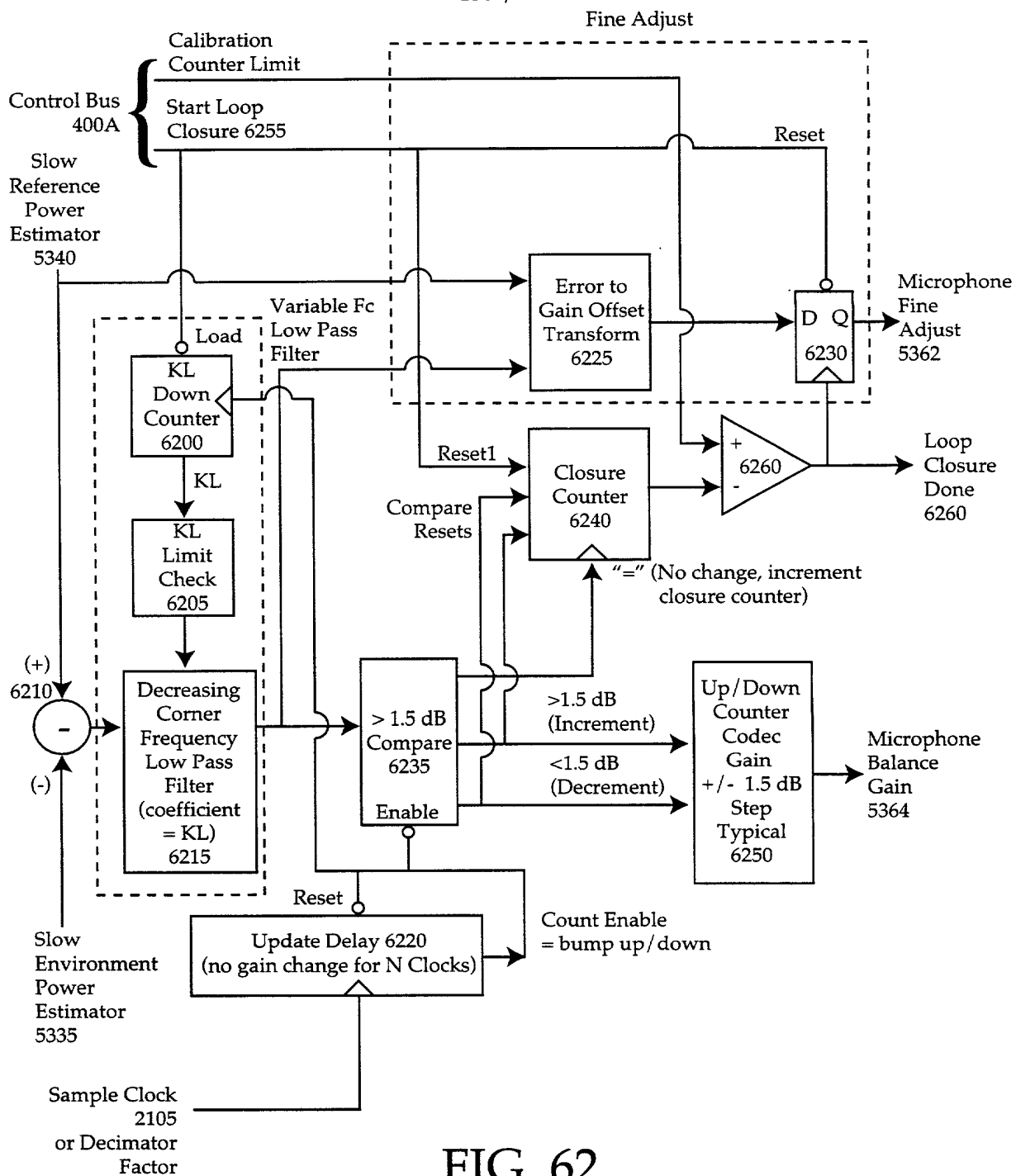
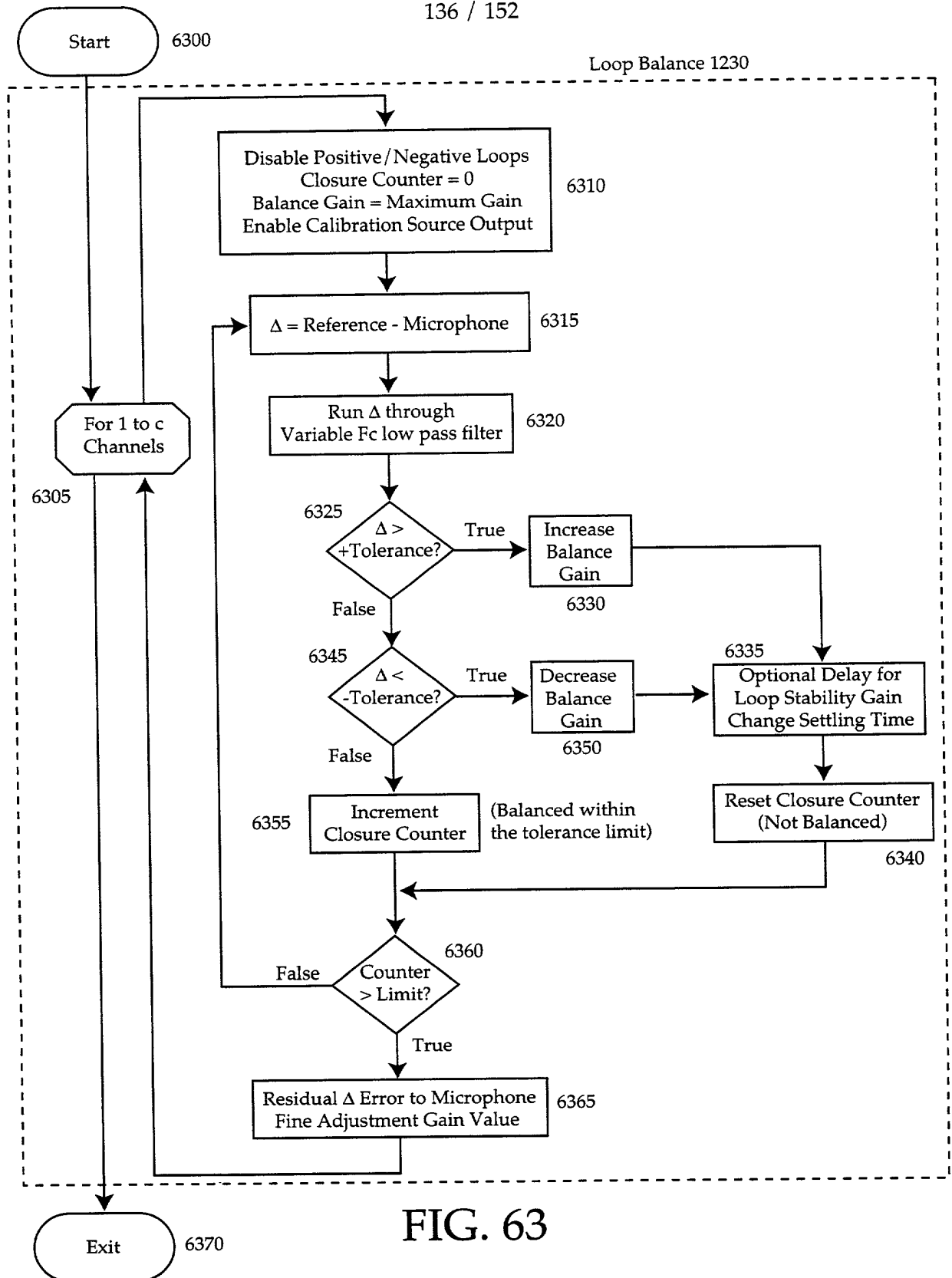


FIG. 62



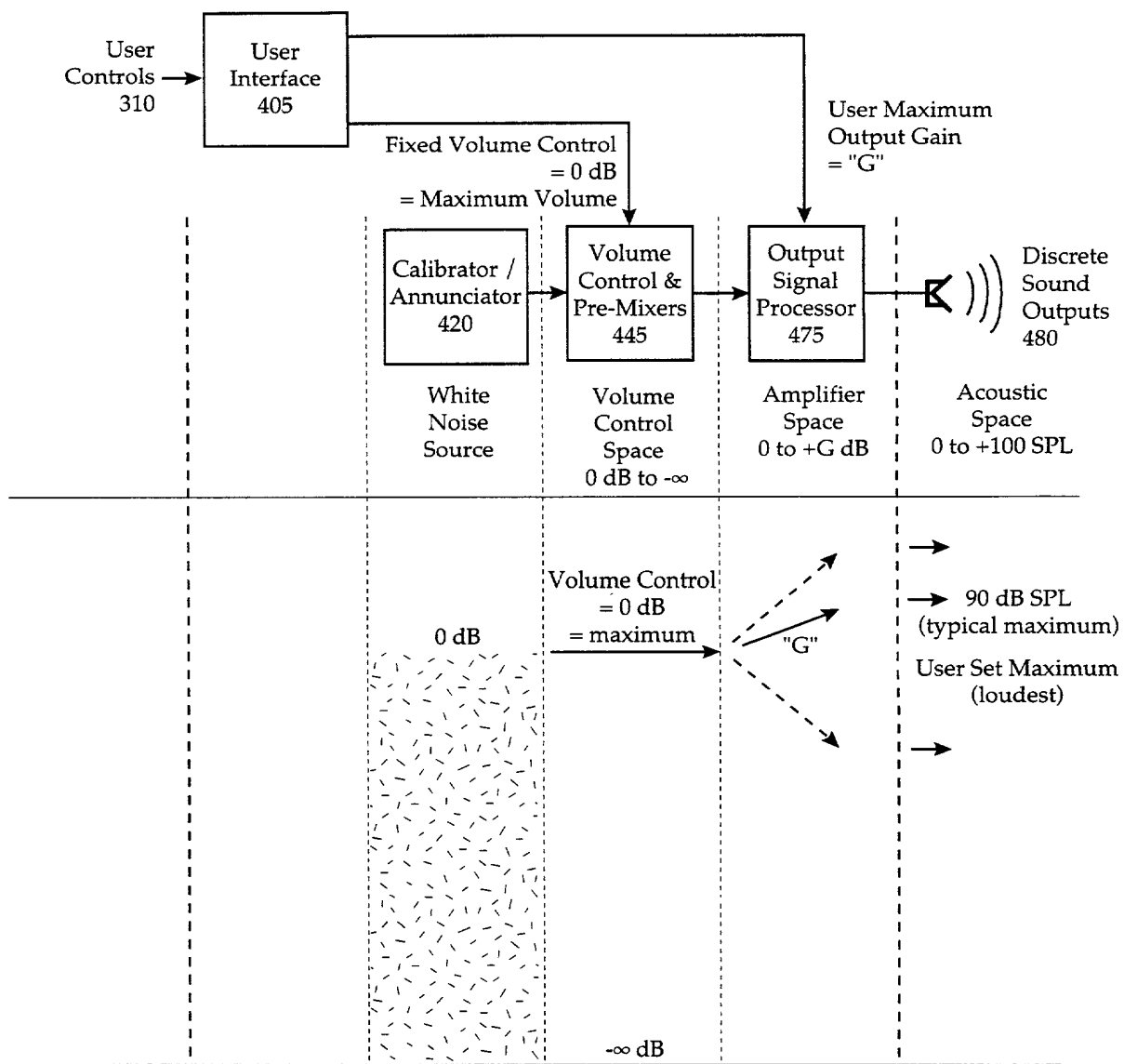


FIG. 64

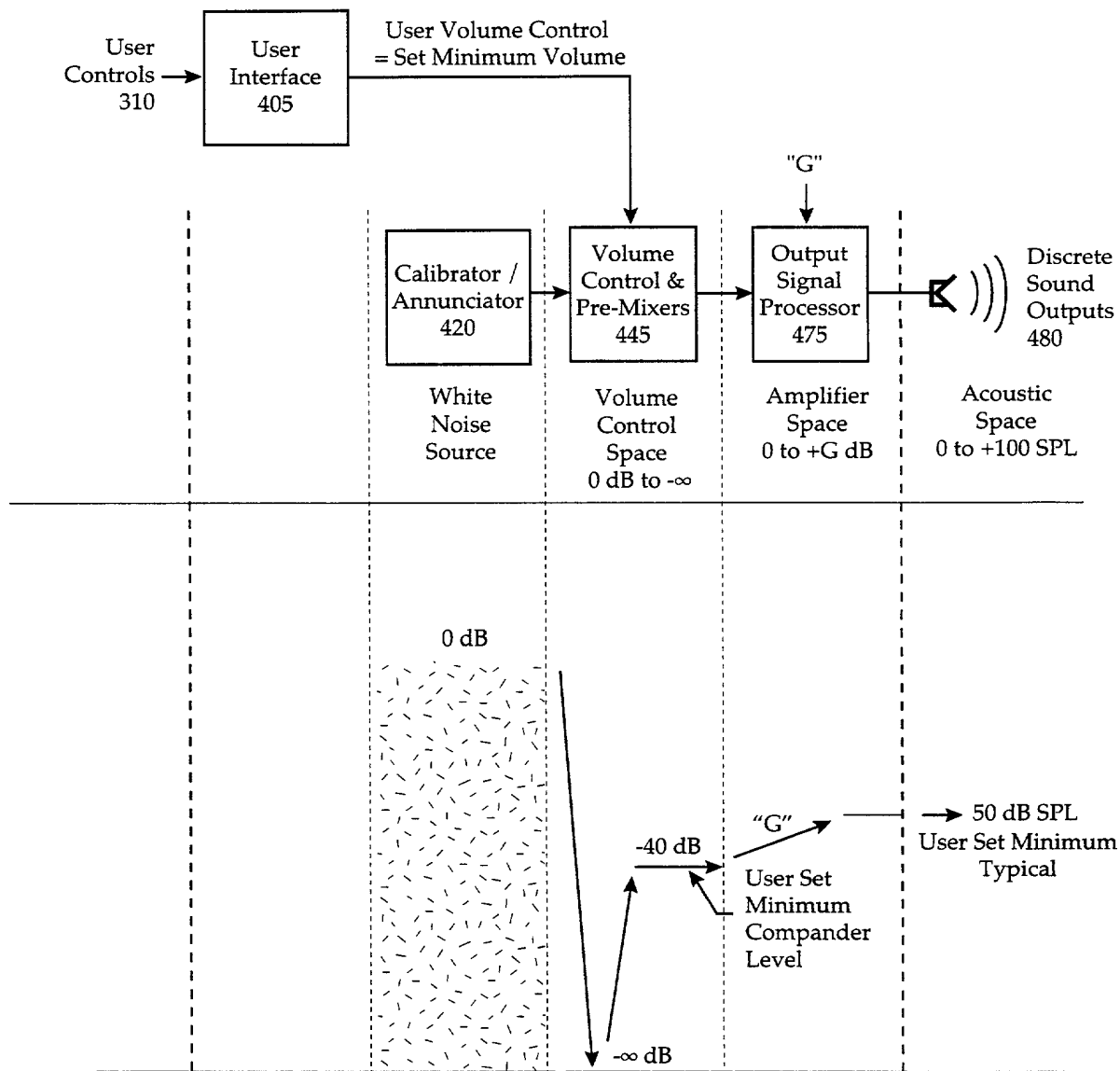


FIG. 65

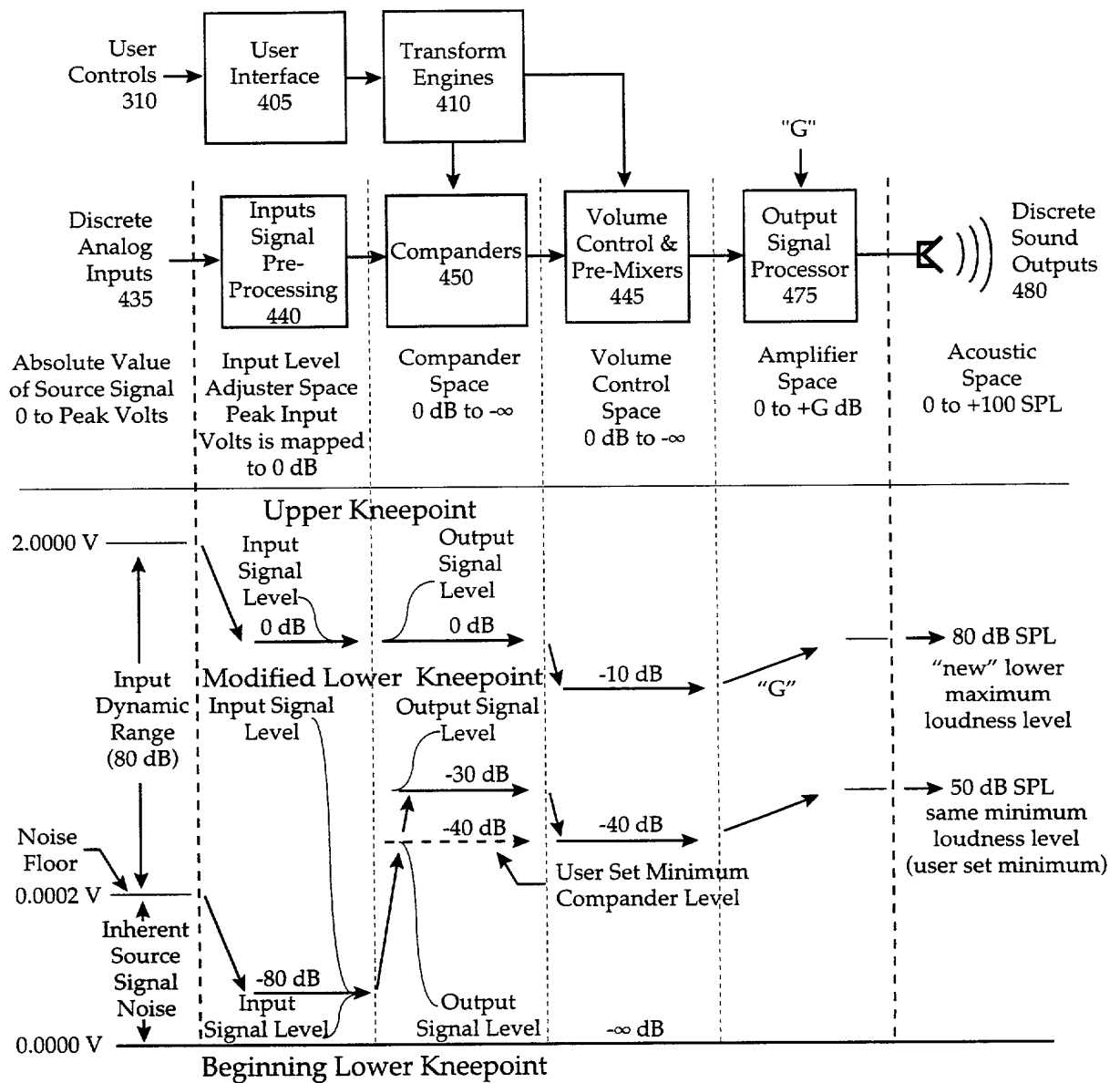


FIG. 66

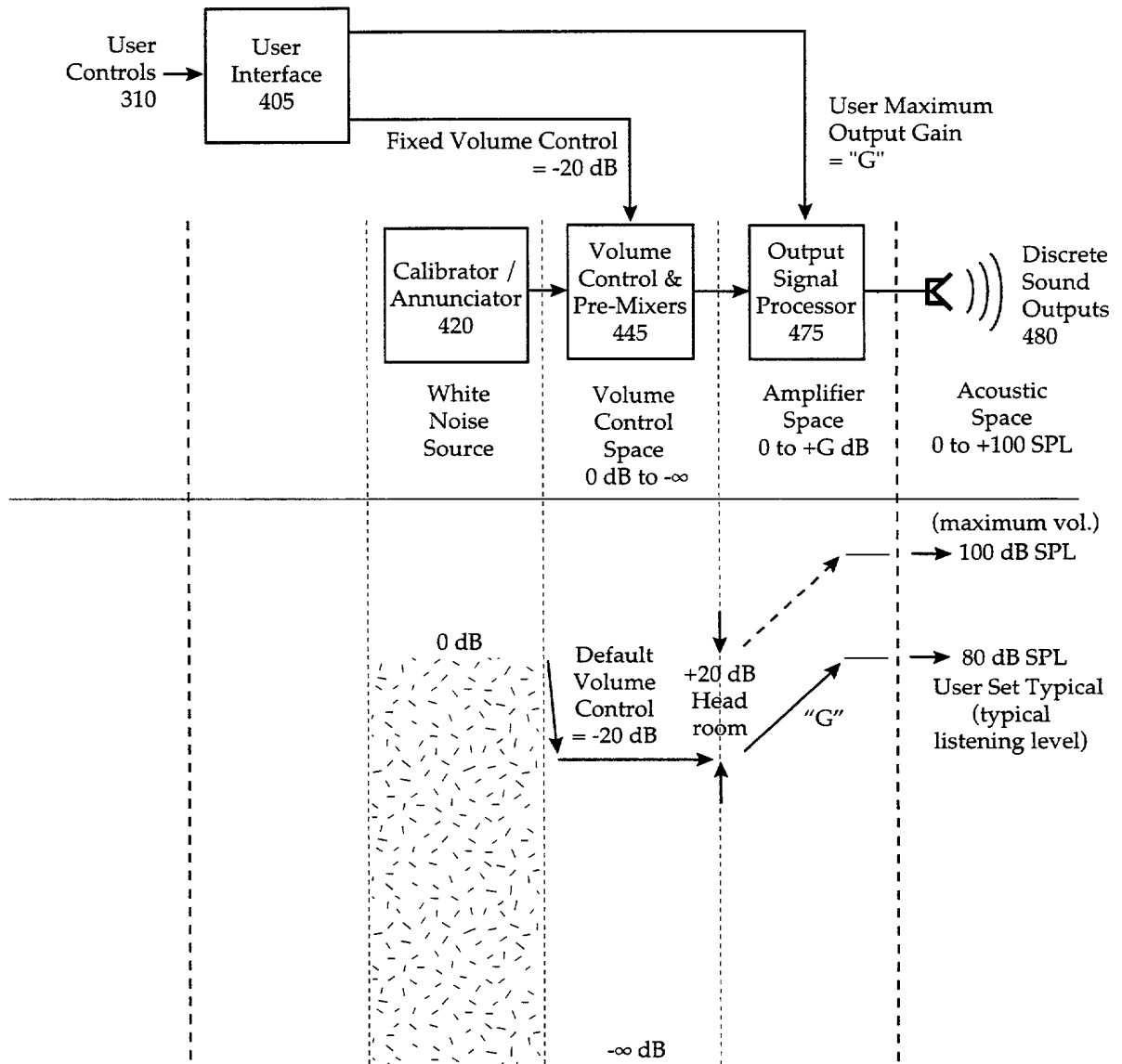


FIG. 67

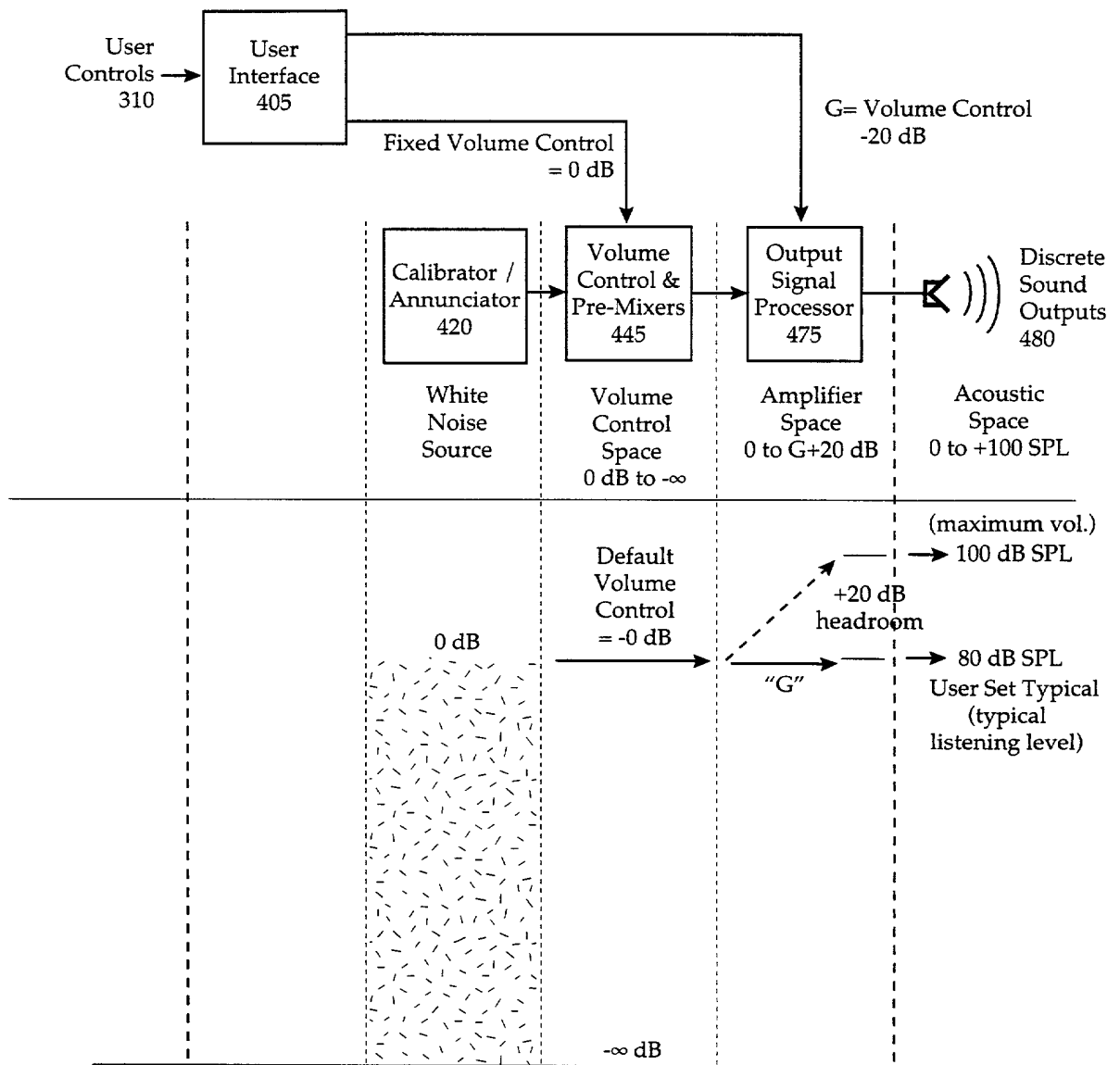


FIG. 68

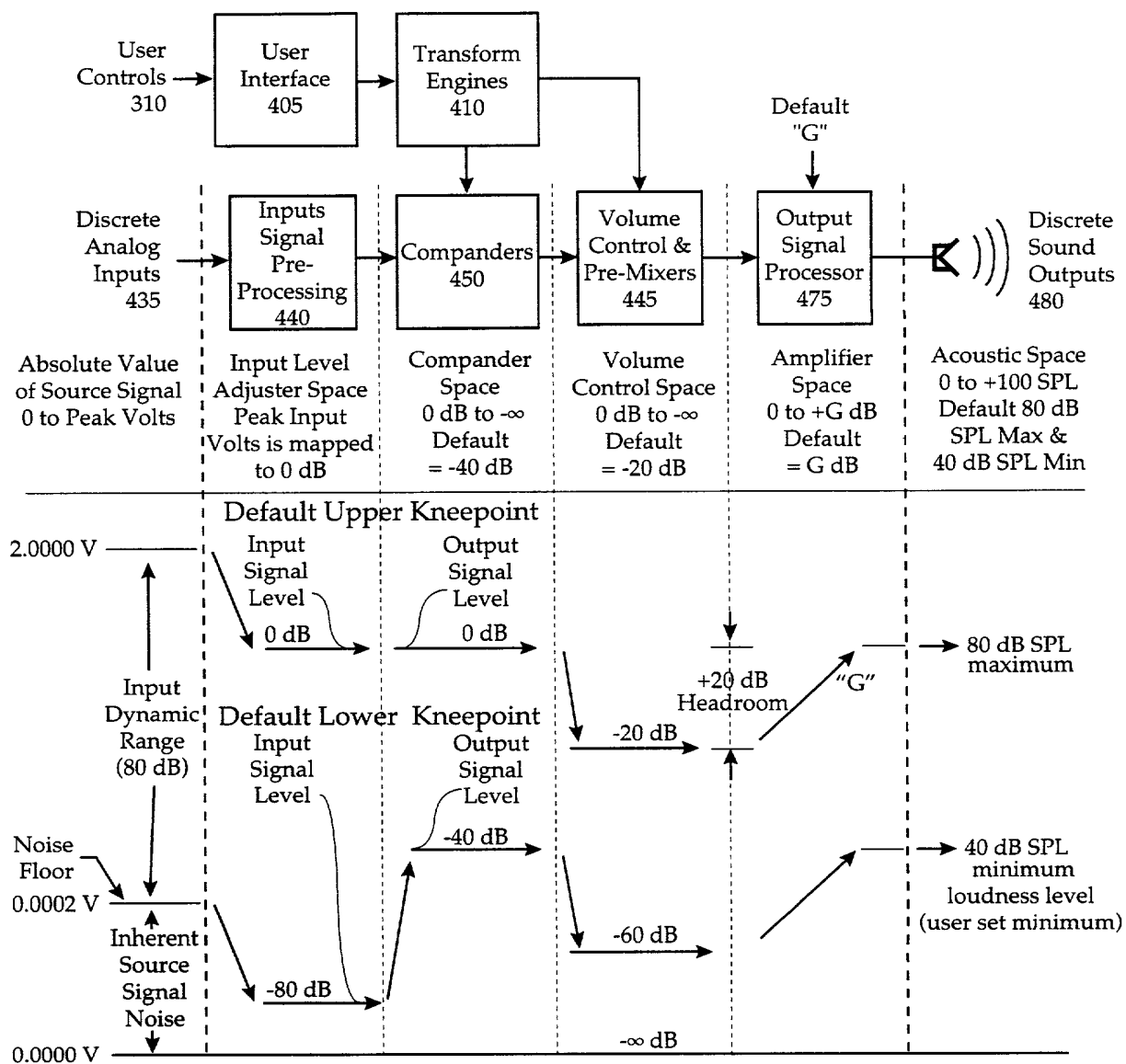


FIG. 69

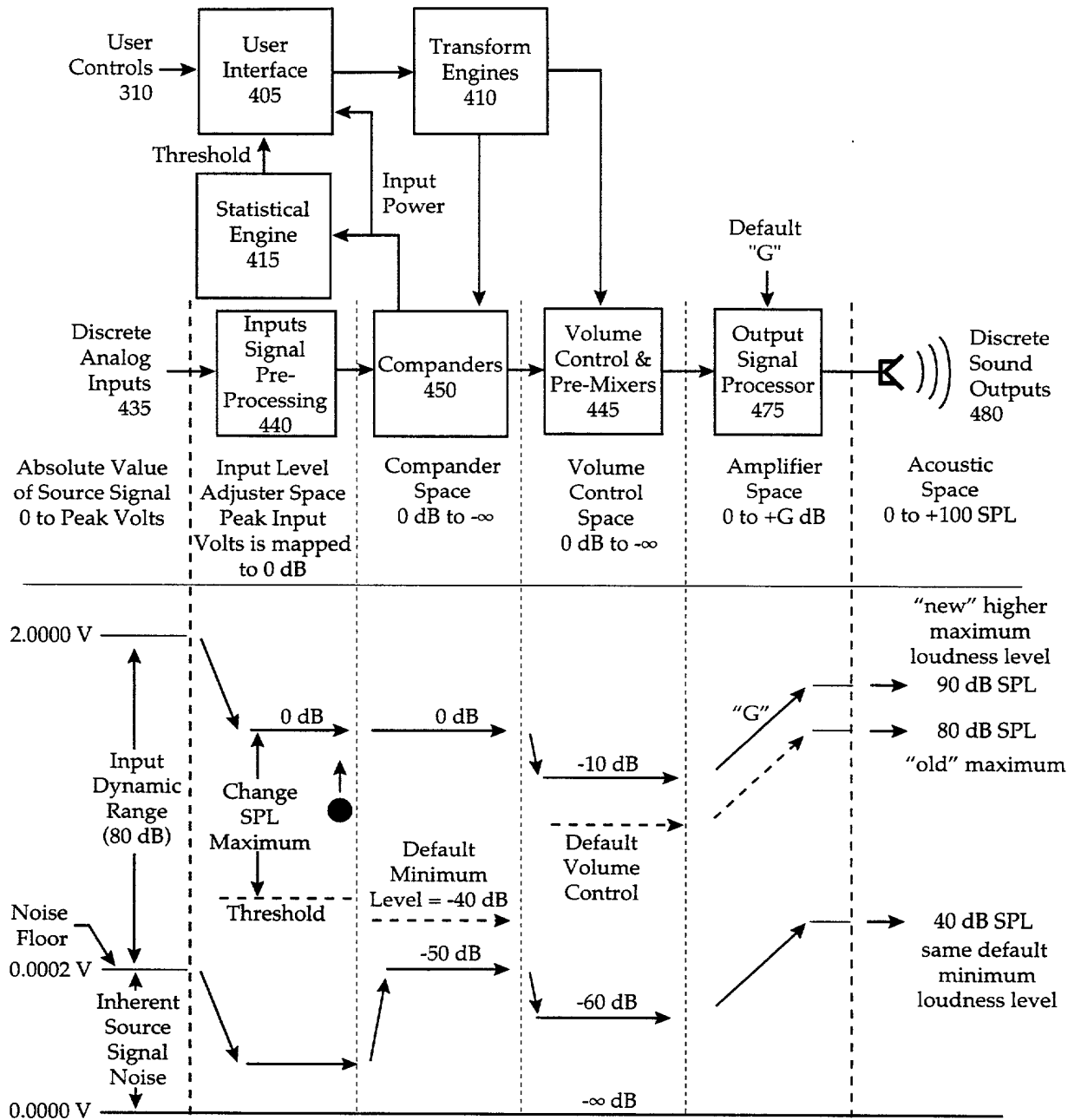


FIG. 70

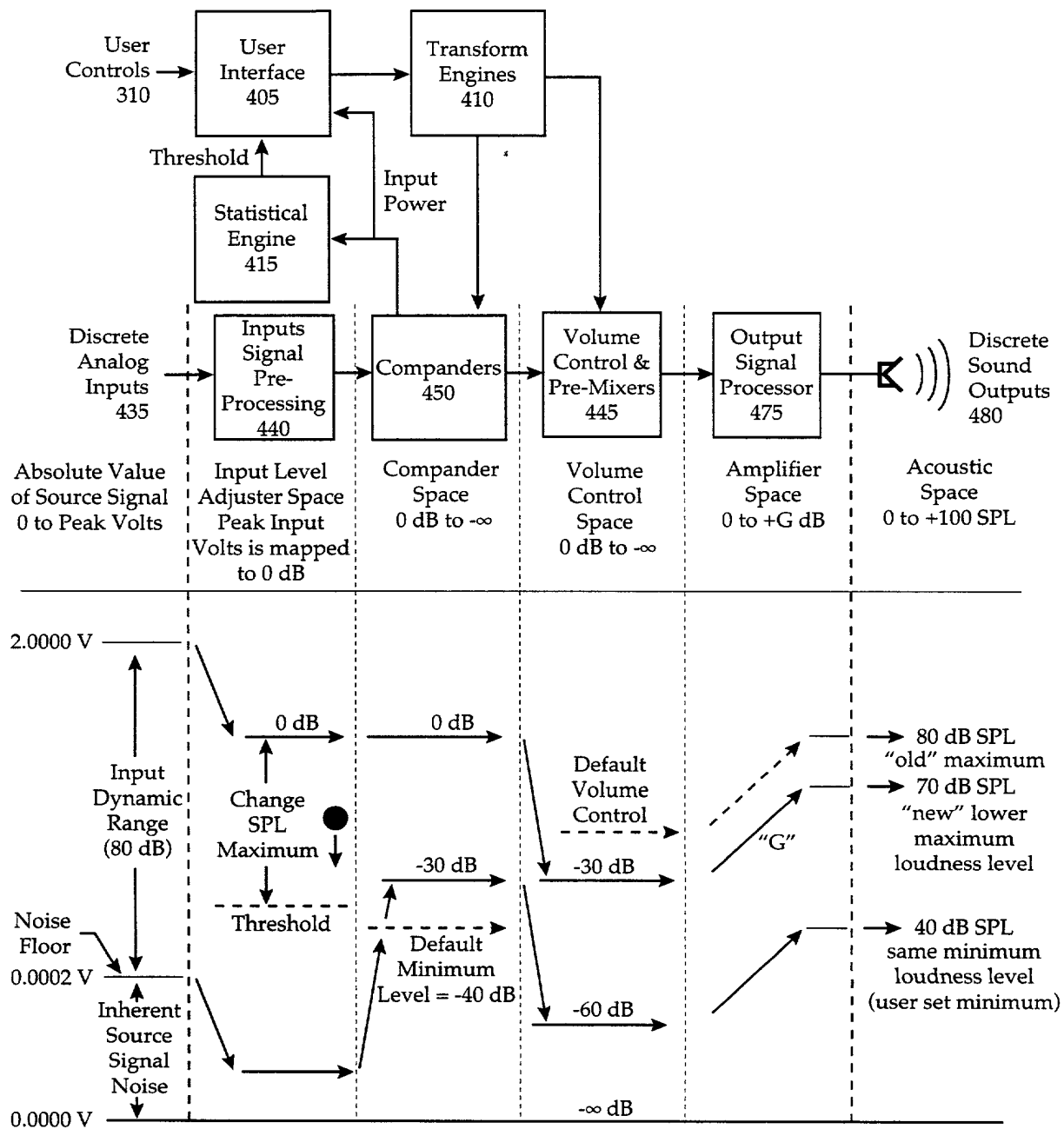


FIG. 71

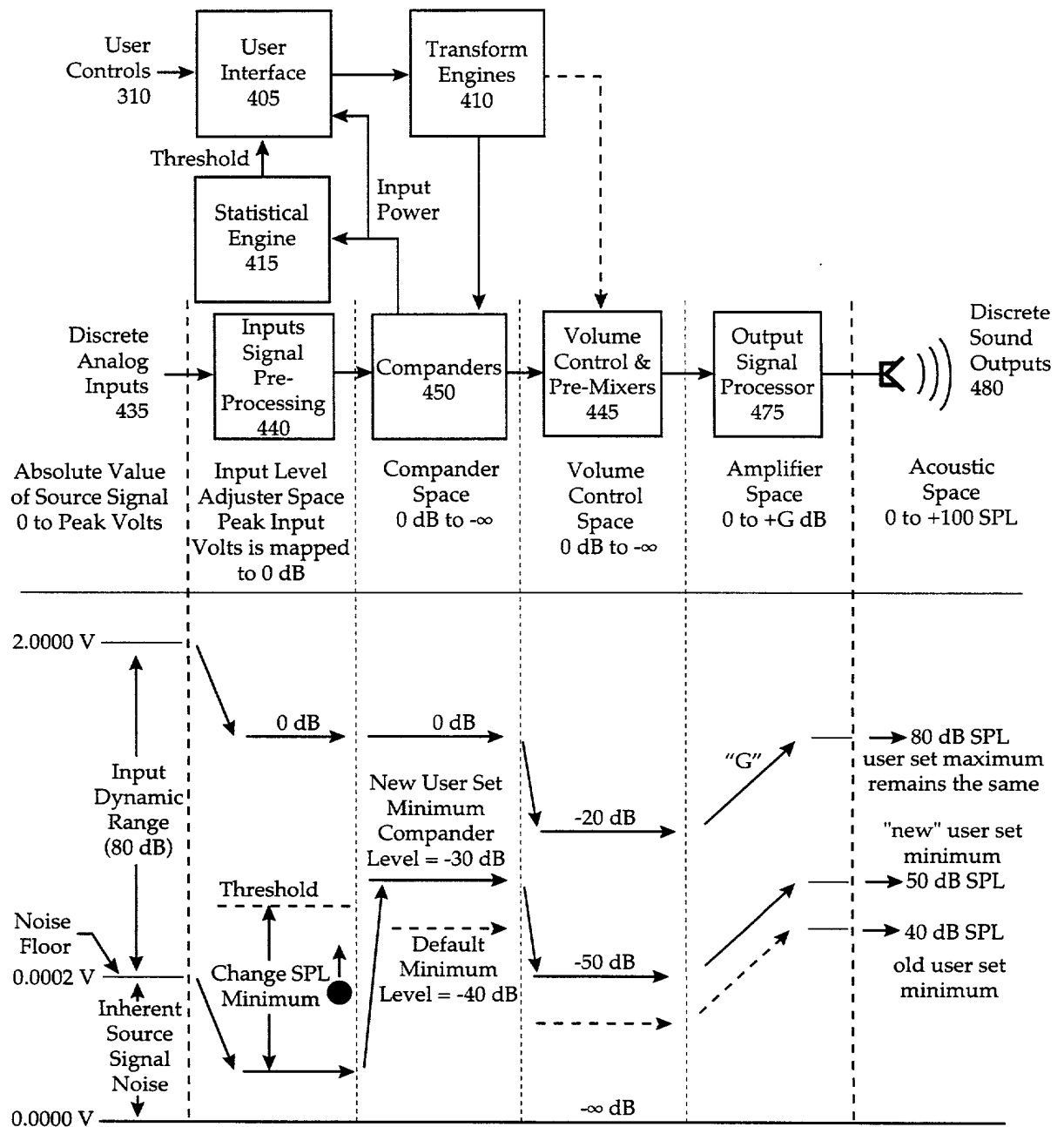


FIG. 72

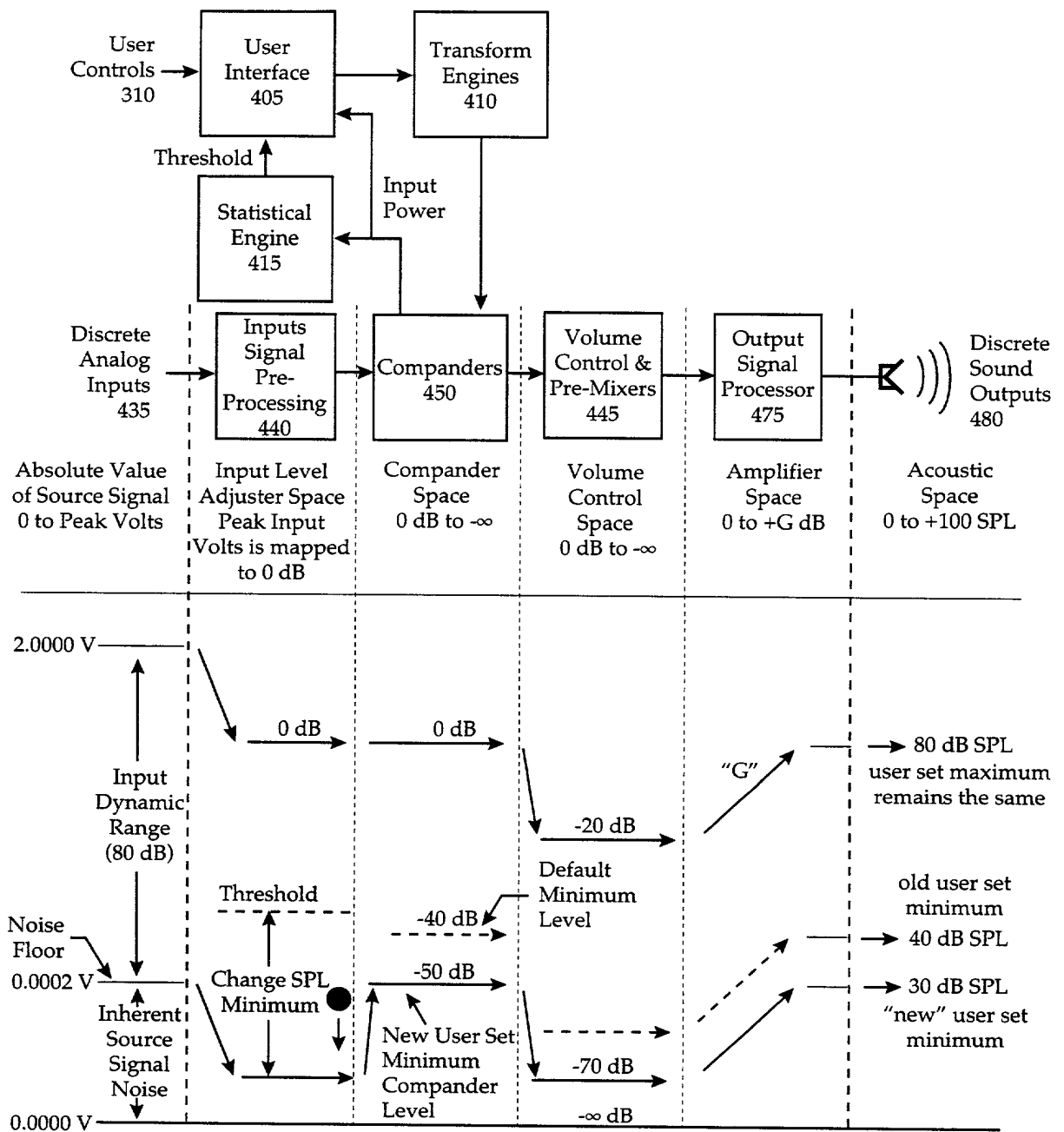


FIG. 73

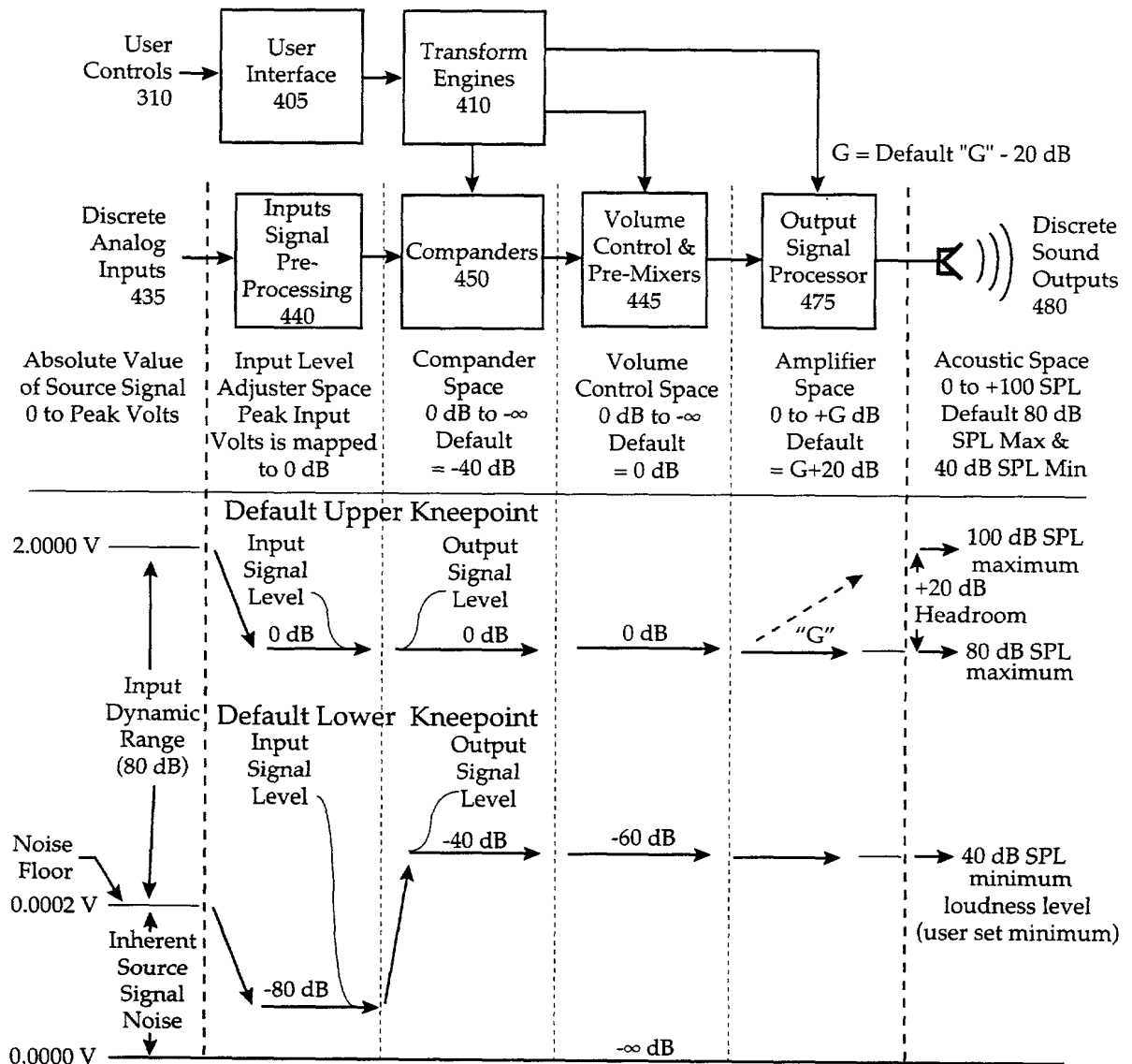


FIG. 74

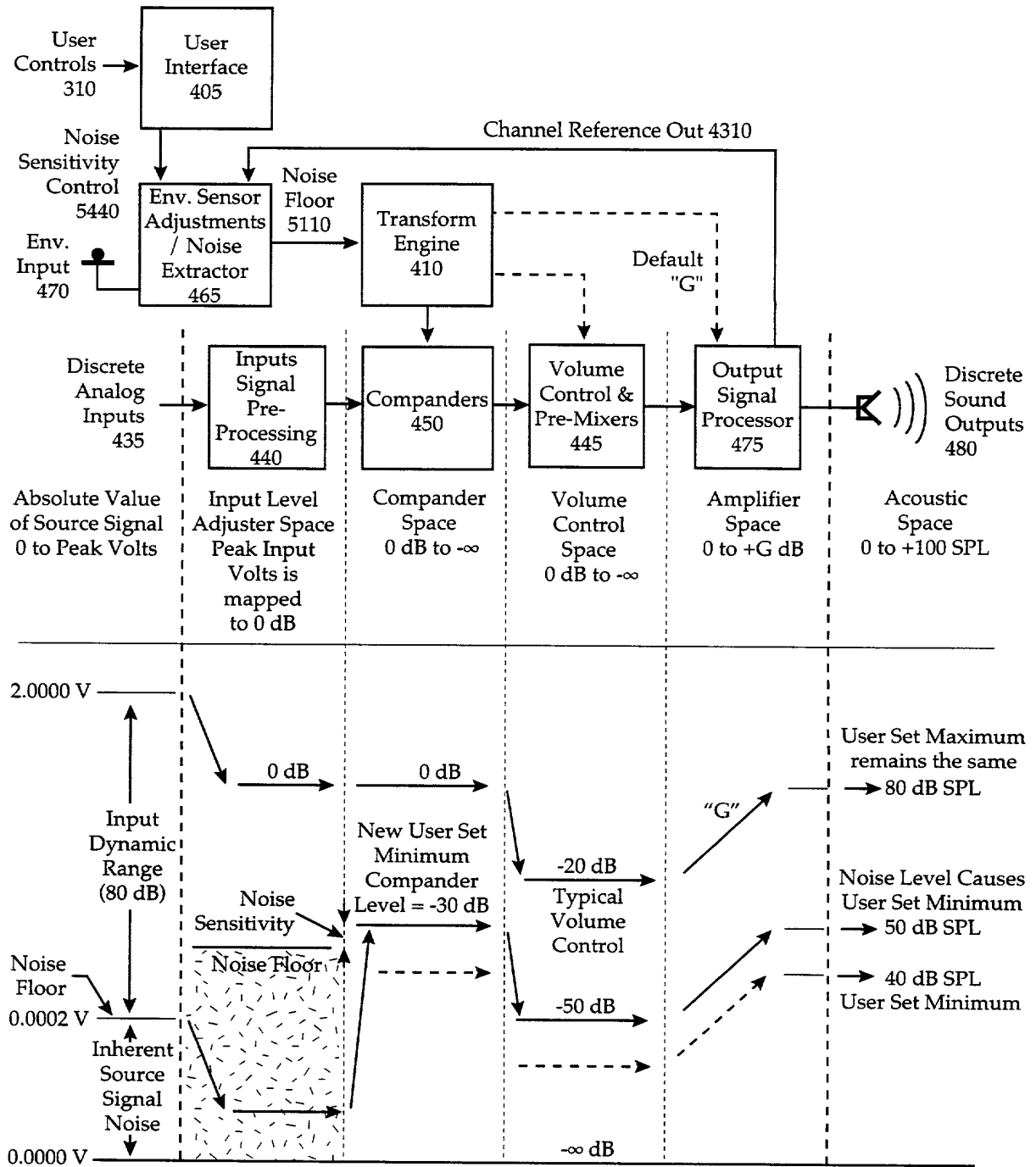


FIG. 75

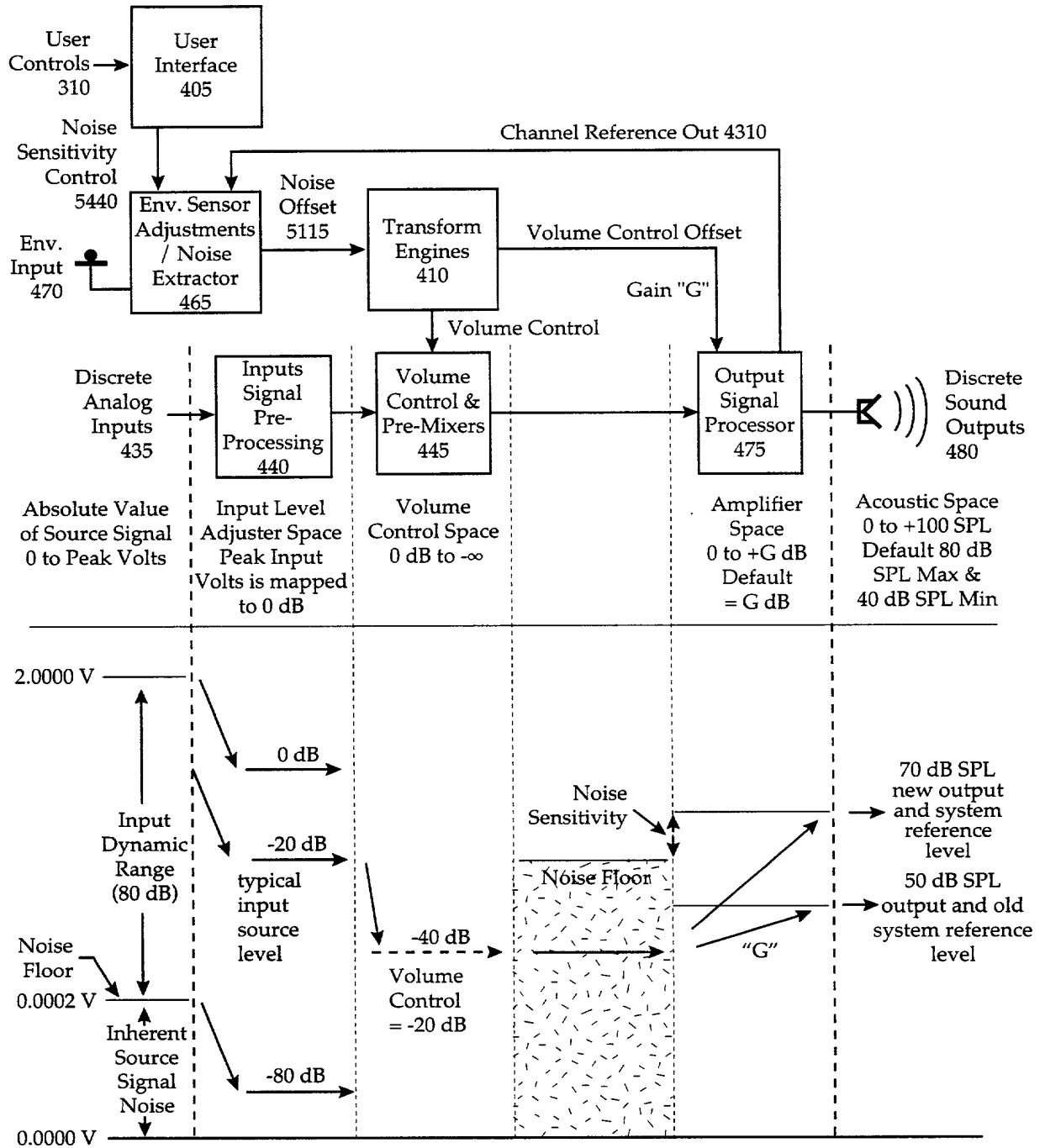


FIG. 76

Setup Command Decoder
and Setup Command Execute
660E and 660F

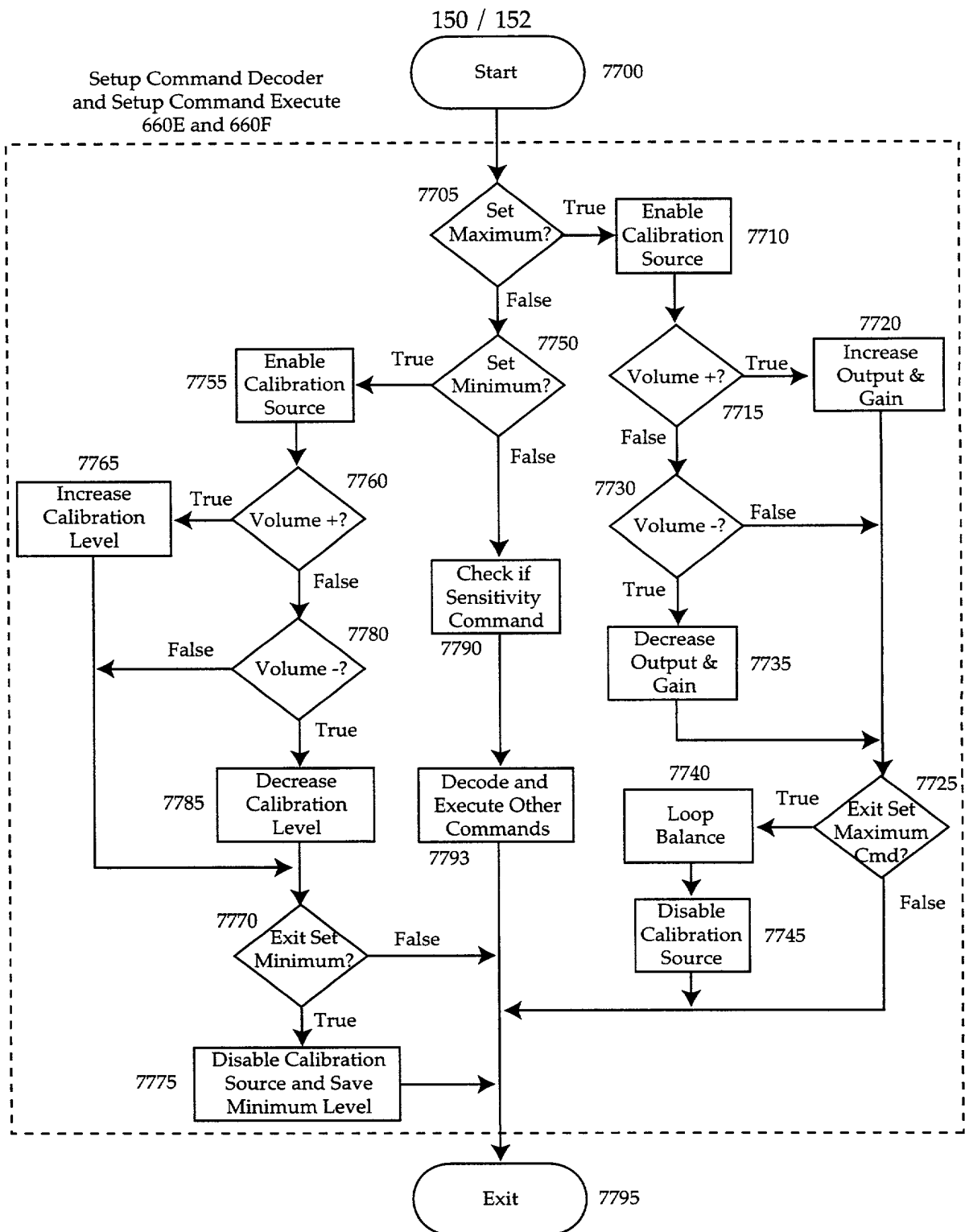


FIG. 77

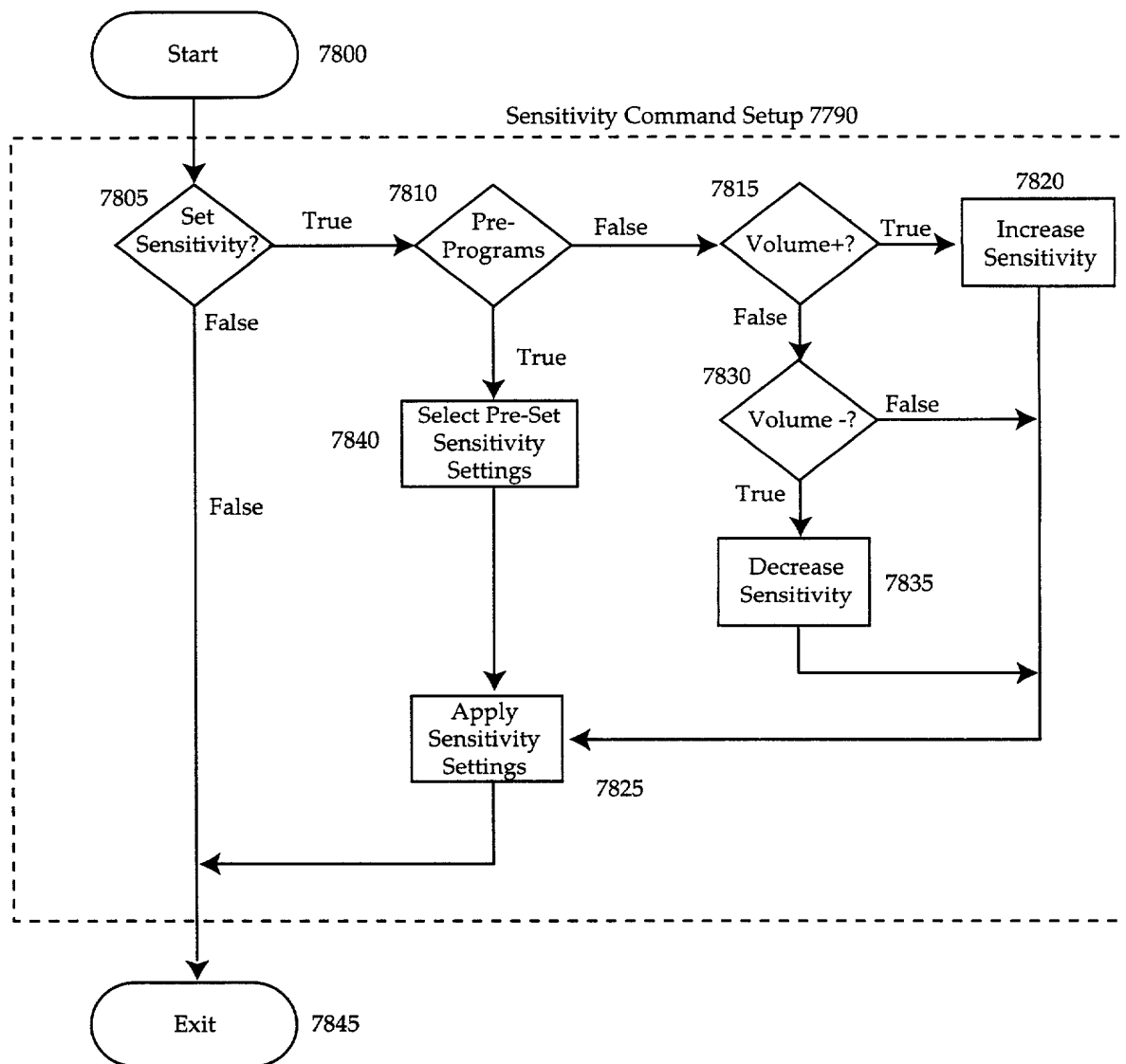


FIG. 78

Operation Command Decoder
and Operation Code Execute
660C and 660D

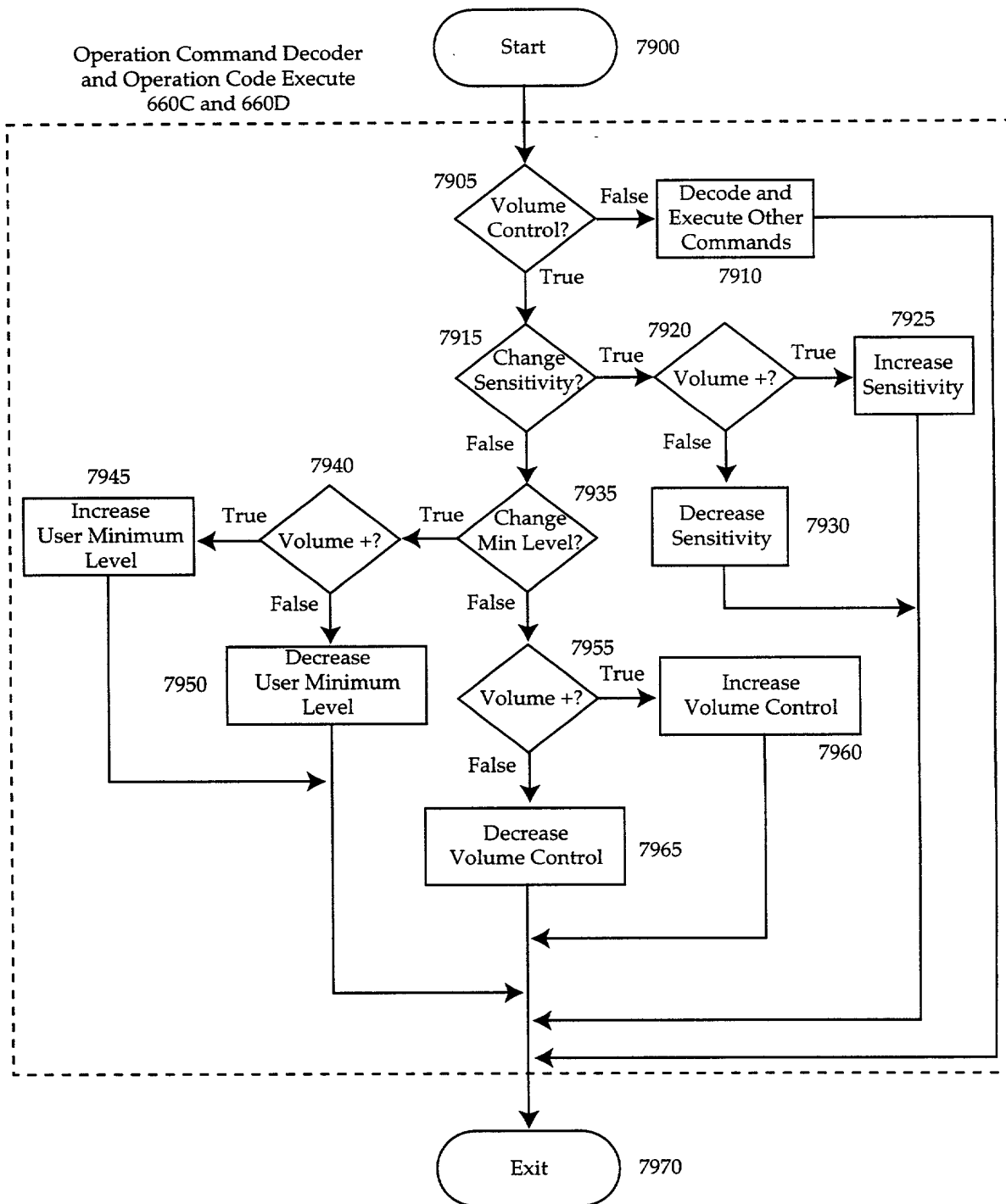


FIG. 79